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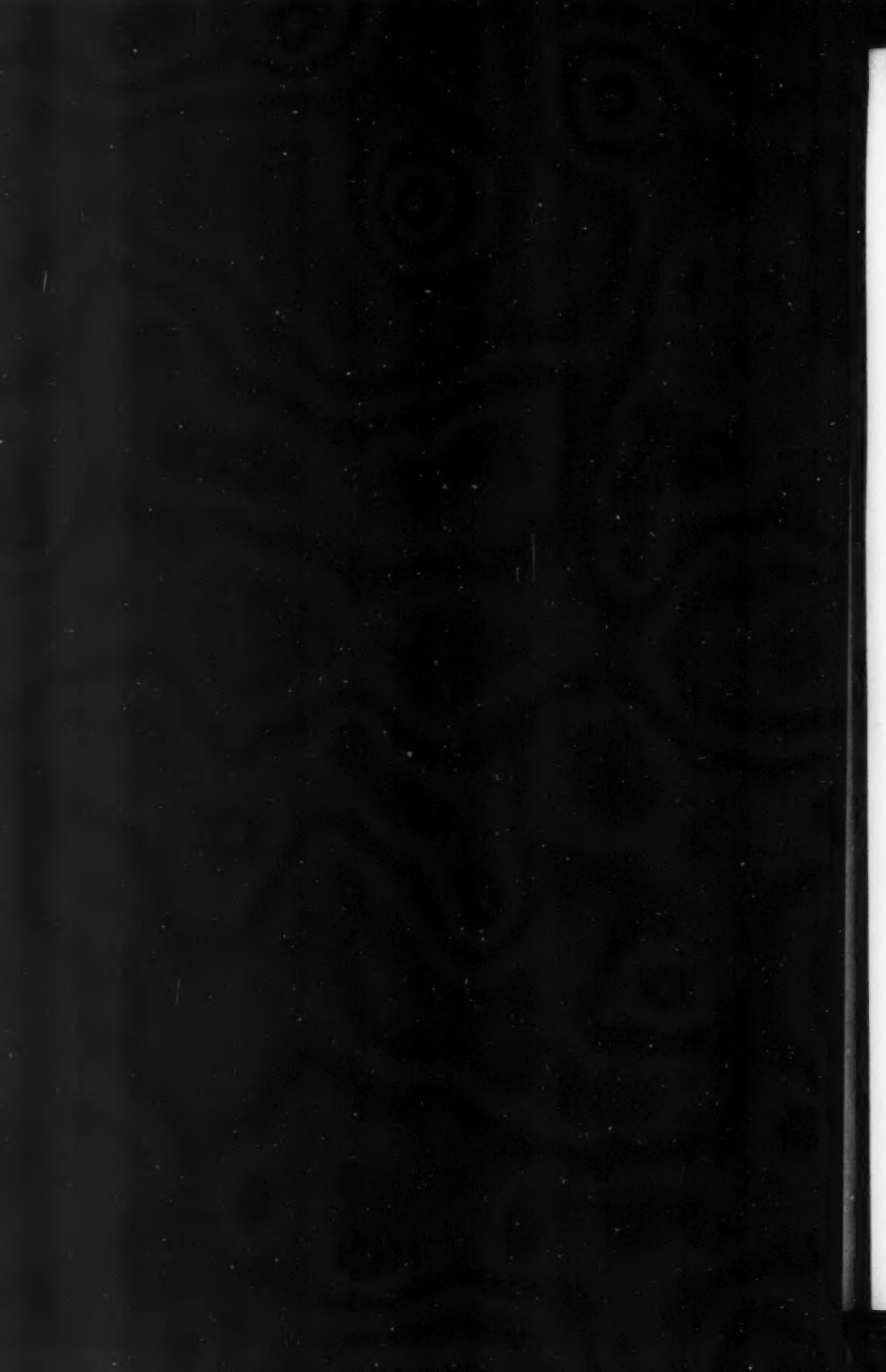
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Volume II. }

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Vol. CCI.

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## THE NYMPH OF SUMMER.

WHEN first the Nymph of Summer woke to  
 pleasure  
 The birds sang shrill and sweet in leafy  
 bowers ;  
 Before her feet June shed her fairest treas-  
 ure  
 And gemmed the untrodden grass with  
 nodding flowers.  
 By some lone fount, in forest dell secluded,  
 Where thick ferns hung their tresses in  
 the stream,  
 All the hot summer days she sat and  
 brooded  
 Over sweet memories of a happy dream.

Men in the tangled forest glades benighted,  
 When the bright moon had hushed the  
 restless breeze,  
 Heard, with dazed mind and every sense  
 delighted,  
 Clear as a bell, her voice rise through the  
 trees.  
 The Nymph of Summer's song, serene and  
 splendid,  
 Cleaving the silence like an angel's wing,  
 Rose glorious through the night, and fitly  
 ended  
 The slowly fading melodies of spring.

So summer sped. Sun unto sun succeed-  
 ing  
 Moved in a fair procession past her gaze,  
 Till sadness seized her soul, as surely read-  
 ing  
 The fated end of all her pleasant days.  
 She saw the darkness wax, the daylight  
 waning.  
 Poor lovely child of summer and the sun !  
 Each flower that withered, mute and un-  
 complaining,  
 Told that her days of life were nearly  
 done.

She feels Death touch her brow with icy  
 finger,  
 And shrinks before him as the blossoms  
 shrink ;  
 She rises slow, no longer may she linger  
 Beside her charmed fountain's mossy  
 brink ;  
 But, wandering down the glades, ere death  
 o'ercome her,  
 Hears, through the silence of the autumn  
 days,  
 The sad-voiced robins singing out the sum-  
 mer  
 And dead leaves falling thick in wood-  
 land ways.

The day draws in ; the mists of eve wax  
 chilly,  
 And fainter grow her footsteps and more  
 faint,  
 The graceful head droops like a faded lily  
 Hung from the dead hand of a virgin  
 saint.  
 Night falls. An owl hoots from the fir-  
 tree cover,  
 A breeze sighs through the rushes dried  
 and sere,  
 And autumn clouds hang their dank tresses  
 over  
 The Nymph of Summer on her lonely  
 bier.

S. CORNISH WATKINS.

Longman's Magazine.

## THE SPRING-TIDE COMES.

THE Spring-tide comes along the way,  
 And from her 'broidered kirtle gay  
 She scatters daisies o'er the hills ;  
 Gold dust falls from the daffodils  
 That crown her head on fell and brae.  
 Her breath woos bloom on bough and  
 spray ;  
 Bright is the marsh-flower's golden ray,  
 When by the softly singing rills  
 The Spring-tide comes.

The young lambs round her footsteps play ;  
 The tassels on the larches sway ;  
 The blackbird's song the valley fills ;  
 Above her head the skylark trills ;  
 The thrushes lilt a roundelay,  
 The Spring-tide comes.

Chambers' Journal. MAGDALEN ROCK.

## SONNET.

For her gait if she be walking,  
 Be she sitting I desire her  
 For her state's sake, and admire her  
 For her wit if she be talking :  
 Gait and state and wit approve her ;  
 For which all and each I love her.

Be she sullen, I commend her  
 For a modest ; be she merry  
 For a kind one her prefer I ;  
 Briefly, everything doth lend her  
 So much grace and so approve her,  
 That for everything I love her.

WILLIAM BROWNE.

From The Edinburgh Review.

# THE LIQUEFACTION OF GASES.<sup>1</sup>

THE "third state" of matter was formally recognized by Van Helmont, a Belgian alchemist, early in the seventeenth century. But his discovery might have slipped back into oblivion had he not emphasized it by the invention of a name. The unseen and unfelt, yet material, substances brought into notice by his researches were called by him "gases," and are called so still. Atmospheric air was not included among them. For it ranked in those days as an "element" in the Aristotelian sense. Boyle, however, became aware of its composite character, though he failed to isolate the "vital" ingredient, the existence and functions of which he divined. It was not, indeed, until more than a century later that oxygen was definitively captured by Priestley and Scheele. Carbonic acid, meanwhile, had been investigated by Black; Cavendish gave, in 1766, the earliest description of "inflammable air," *alias* hydrogen; and nitrogen was made known by Priestley in 1772. Then Lavoisier, extricating these valuable discoveries from the misapprehensions in which they lay involved, and bringing them into logical connection with the results of his own inquiries, shaped the new science of pneumatic chemistry.

Matter in general was thenceforward systematically studied under its solid, liquid, and gaseous forms. But there was as yet no certainty that every individual kind of matter was capable of assuming each in turn. One example of this versatility had, it is true, been at all times familiar. Water undergoes its cycle of changes from ice to steam naturally, and as a matter of common

observation. No criterion was, however, at hand by which to decide whether, in so doing, it constituted an exception or followed a rule. Indeed, we are still ignorant of any abstract principle bearing on the subject. Thus, apart from actual experience, there could be no well-grounded assurance that the behavior of water would prove typical. Under altered conditions it even departs from its own standard. In a partial vacuum ice cannot be melted. When heated above freezing-point, in a vessel exhausted of air to a certain degree, it passes directly into vapor. On a planet, in fact, possessing an atmosphere one hundred and sixty-five times rarer than our own, liquid water could not exist.

Whether placed as near to the sun as Mercury, or as far from him as Neptune, such a globe could show neither seas nor streams. No rain could fall there, no dew be deposited; aqueous condensations would invariably take the form of snow. Sublunary experience, too, makes us acquainted with many complex substances which cannot change their state, because the application of heat very quickly tears their innermost structure to pieces. Who, for instance, would attempt to melt wood or leather? The very idea seems absurd, because every one knows that they char or burn while still solid. That is to say, they cease to be, as wood or leather, long before their respective ideal fusing-points are reached. Elementary bodies cannot, of course, be decomposed; but some resist liquefaction, if not absolutely, yet at least so far as to sublime without melting, like ice in a vacuum. One of these is arsenic. And carbon volatilizes only at an enormously high temperature, and has never been liquefied. Possibly the intermediate state might be forced upon it by accompanying great heat with high pressure; but the idiosyncracies of chemically distinct substances are so peculiar that its reluctance may represent real inability to liquefy.

The law, however, of the three states of matter is most probably universally

<sup>1</sup> 1. The Chemical Work of Faraday in relation to Modern Science. Lecture delivered at the Royal Institution, June 26, 1891. By Professor Dewar, M.A., F.R.S.

2. Magnetic Properties of Liquid Oxygen. Lecture delivered at the Royal Institution, June 2, 1892. By Professor Dewar, M.A., F.R.S.

3. Liquid Atmospheric Air. Lecture delivered at the Royal Institution, January 20, 1893. By Professor Dewar, M.A. F.R.S.

4. The Scientific Uses of Liquid Air. Lecture delivered at the Royal Institution, January 19, 1894. By Professor Dewar, M.A., F.R.S.

valid both for simple bodies and for stable compounds. The power by which it is enforced resides in heat. Near the bottom of the scale of temperature, solidification reigns supreme; towards the opposite extreme, vaporization. The moon exemplifies the first condition, the sun the second. Between the two stands our earth, in which solids, liquids, and gases co-exist. It is composed, in other words, of the three antique "elements," earth, water, and air. Now, the fact that, under the same circumstances, different substances are differently aggregated is none the less remarkable for being tritely familiar. It seems a matter of course that our atmosphere should, at all times and seasons, remain imperturbably ethereal—that rigid rocks should enclose a heaving ocean, and that mercury, alone among metals, should flow like water. And it is easy to see that the prevalence of such like incongruities is essential to the scheme of things to which we ourselves belong. Unanimity among the various kinds of matter in freezing, melting, and boiling, would obviously exclude the possibility of life. The question, then, *why* it is excluded, answers itself; but if we go on to ask *how* it is excluded, we meet with no truly articulate response. All that can be said is that the observed wide diversities of melting and boiling points result from an equally wide diversity in the conditions affecting the molecular equilibrium of the substances severally concerned. As an explanation this is evidently unsatisfactory. It amounts to little more than a restatement of the same fact in different words. Yet the difference of wording is instructive; it implies a good deal. Let us consider and draw out its meaning.

The word "molecule"—equivalent to *little mass*—was employed in 1811 by an Italian physicist named Avogadro, to designate the smallest particles of any substance—solid, liquid, or gaseous—in which its distinctive qualities are preserved in their integrity. Molecules are not indivisible. They can be severed into "atoms" by the

influences of heat, light, electricity, or chemical affinity; but the operation is destructive of the body originally composed by them, and the new ones by which it is replaced are often wholly diverse from it in their qualities and relationships. Thus, each of the ultimate particles of water consists of at least three unimaginably minute portions—two of hydrogen and one of oxygen—the separation of which involves the demolition of water and the substitution for it of its gaseous constituents. Conversely, oxygen is converted into ozone when its molecules are compelled, through the action of electricity, to annex each a third atom of the stuff itself. Yet ozone, though nothing but oxygen chemically condensed, possesses highly characteristic qualities of its own.

Molecular structure, then, and the forces of which the modes of action are modified by it, determine the properties of matter. A molecule is a sub-microscopic piece of mechanism of exquisite flexibility, conjoined, in many cases, with a high degree of stability. An organic whole, complete in itself, it is nevertheless sensitive to manifold influences from without. It is all alive with energy in the shape of motion, the motive power being supplied by heat. Apart from this stimulus it would be as inert as a locomotive with the steam shut off. Matter in this state of hibernation, however, lies outside the scope of terrestrial experience. Even at the lowest temperatures attainable by artificial contrivances, its particles thrill with varied movements, which, as they gain intensity through increase of heat, tend to separate the molecules in opposition to the cohesive force drawing them together. Cohesion acts with enormous power, but over a narrowly limited range. M. Quincke calculates that the mutual attraction of two molecules is insensible at distances exceeding one twenty-thousandth of a millimetre;<sup>1</sup> yet within that minute interval its action is of amazing vigor. The irresistible energy of heat can,

<sup>1</sup> Glazebrook, *Properties of Matter*, p. 119.

it is true, unlock the grip of the molecules; but only when lavishly expended. The force consumed in melting one pound of ice would suffice, if mechanically applied, to lift it about twenty-one miles from the ground; and the vaporization of the resulting pound of water would be a piece of work nearly seven times more arduous again. Yet the large stores of heat thus employed in overcoming cohesive bonds produce no thermometric effects. They remain "latent" in the bodies they serve to modify, and are given out again in undiminished quantity during the inverse processes of liquefaction and solidification.

The differences between solid, liquid, and gaseous bodies depend mainly upon changes in the relative mobility of their ultimate particles. These little systems, which are crowded by quadrillions into every cubic inch of matter, are in all cases animated by movements of vibration, perhaps also of rotation and even of orbital circulation; but under the strict rule of solidity they possess no *proper* motions; each has its own place and keeps it. Liquefaction, however, confers a translatory faculty. The molecules of fluids travel indefatigably. Let any one who doubts this to be a fact introduce a few drops of some colored tincture into a glass of water, and observe, after a time, the equable diffusion of the tint. He will no longer hesitate to admit the progress of incessant, undirected interstitial movements. Yet the qualified freedom of liquidity is bondage compared with the unrestricted license of the gaseous state. Here the last link of cohesive constraint is broken. Each minutest particle of an *aëriform* fluid is not only virtually independent of the others, but strives towards definite separation from them. Hence a gaseous mass forms of itself no definite surface. If distributed in the shape of an atmosphere it may be coerced by gravity. When evolved on the earth's surface it can be preserved only by being imprisoned; for its inner principle is one of limitless dispersion.

The mastery over the states of matter

belongs to heat. Thermal energy imparts the movements by which cohesion is overcome. There is no substance so obdurate but that it gives way before the persistent attacks of the "drudging goblin" of our laboratories. Even platinum volatilizes in the electric arc at a temperature of about 4500° of Fahrenheit. Intense cold, however, is much more difficult of production than intense heat. And only by means of extraordinarily intense cold can truly *aëriform* substances be brought to submit to the yoke of internal attractions. Nor can they be mechanically compelled to do so. Pressures up to twenty tons per square inch were, by Natterer, in 1853, brought to bear upon large volumes of hydrogen, oxygen, and nitrogen, without the slightest effect in changing their state; and air has been quite fruitlessly, so far as liquefaction was concerned, condensed until heavier, bulk for bulk, than water.<sup>1</sup> Thermal activity must, in fact, be reduced below a certain definite point before the passage of a gas into a liquid becomes possible. This general principle was recognized by Faraday in 1826, but its detailed development by Andrews in 1869 constituted a fresh discovery of the highest importance. He showed that above a certain fixed temperature, proper to each, *aëriform* fluids cannot assume the liquid state. Many of these "critical temperatures" were determined by him. That of carbonic acid, for instance, he found to be 88° F. Above that point no compulsion avails to bring about liquidity; below it, pressure is effectual, and more readily with diminution of heat. In other words, this substance is, in the technical sense, a gas when hotter, a vapor when colder, than 88°. No less than 144° of frost are, however, needed to liquefy it under ordinary atmospheric pressure. At the sea-level, that is to say, carbonic acid boils in open vessels, at -112°. Water, as everybody knows, reaches the corresponding stage 324° higher, at 212°; but its boiling point can, by means of continually increased

<sup>1</sup> Barker, Text-Book of Physics, p. 319



pressure, be pushed up the scale as far as 773°. Red-hot water is thus a possibility; although in approaching, even distantly, the critical temperature above which it can only subsist as a gas, it becomes dangerously explosive. Volcanic outbursts are often, it is believed, immediately due to the sudden flashing into steam of superheated water.

The critical temperatures of the various kinds of matter extend over a wider range than has yet been thermometrically explored. Those of some of the metals, as well as of carbon and silicon, must represent an enormous degree of heat; those of several gases have been ascertained to verge towards the lowest limit of cold. Their several positions depend upon the way in which the balance, in each particular case, inclines between the antagonistic forces of heat and cohesion. For, however closely the particles of a body may be constrained to approach each other, they will not cohere while in extra rapid motion. This doctrine is of grave significance to physical theory; and the guidance afforded by it is indispensable to the success of practical researches into the transformations of matter.

Lavoisier divined the not too obvious truth that the "state" of any material substance is a mere question of temperature, and that consequently the so-called "permanent" gases might, by extreme cold, be reduced liquids, and these again to solids. And Dalton wrote, in 1801: "There can scarcely be a doubt entertained respecting the reducibility of all elastic fluids, of whatever kind, into liquids; and we ought not to despair of effecting it in low temperatures, and by strong pressure exerted upon the unmixed gases."<sup>1</sup>

The experimental verification of this forecast, now all but complete, was begun by Faraday. In 1823 he announced the liquefaction of chlorine; and he was similarly successful with carbonic acid, nitrous oxide, cyanogen, ammonia, and some other gases, their continued evolution in closed vessels

furnishing the pressure to which these results were due. The assistance of cold was not invoked; and, indeed, the difficult art of refrigeration was then in its infancy. Its wonderful progress in recent times may be said to date from Thilorier's production, in 1835, of solid carbonic acid. "Snow" of this peculiar description might, so far as appearances go, have come from an Alpine *nevé*. Although cold enough to give a severe burn, it can be lightly handled with impunity, and is tolerably permanent even in warm air. Mixed with ether, it enabled Faraday to resume in 1844 his efforts towards condensation with the aid of temperatures as low as -166° F. Six gases, nevertheless, continued to hold their own. The chief of these were hydrogen, oxygen, and nitrogen; but the resistance of all except hydrogen has since been overcome.

The liquefaction of oxygen by two independent investigators, Pictet of Geneva, and Cailletet of Paris, was announced to the French Academy of Sciences on the same day of December, 1877.<sup>2</sup> Unknown to each other they had been working for several years along parallel lines. Their success was, indeed, determined by the use of an identical method. The gas, loaded with the weight of five or six hundred atmospheres at a temperature of about -130° F., was then suddenly allowed to escape through a narrow aperture. The ensuing violent expansion consumed a large quantity of heat, the abstraction of which from an adjacent portion of the same substance cooled it to the point of condensation, and liquid oxygen was for the first time seen on our planet. But only in a thin jet and during a few seconds. Its capture for examination was out of the question.

More tangible results were obtained in 1883 by the Russian chemists Wroblewski and Olszewski. Their liquid oxygen was no mere momentary vision, but submitted to rule and measure in a capillary tube. Its qualities

<sup>1</sup> Quoted by Dewar, *Proceedings Royal Institution*, vol. viii., p. 657.

<sup>2</sup> *Comptes Rendus*, t. lxxxv., pp. 1214, 1217.

could thus be studied to advantage, and the inquiry led to the acquisition of much valuable information regarding modes of procedure at low temperatures.<sup>1</sup>

These have of late in the laboratory of the Royal Institution, been carried to an extraordinary degree of perfection. The experiments conducted there are not only on a totally unprecedented scale, but give evidence of remarkable sagacity in the adaptation of means to an end. Professor Dewar has been occupied with them during at least ten years, but their striking results were first made known to the general public on the occasion of the Faraday centenary in 1891. The numerous audience collected in the theatre of the Royal Institution on Friday evening, June 26 of that year, were amazed to see liquid oxygen freely on tap and drawn off, to a vulgar apprehension, *smoking hot*. In point of fact it was boiling at a temperature of  $-296^{\circ}$  F. ( $328^{\circ}$  of frost), its steaming appearance being due to the conversion of the moisture in the surrounding air into ice particles through contact with the swiftly escaping gas. When cleared, by filtering through blotting paper, of some fine dust of solid carbonic acid, it wore the aspect of limpid light blue water. A few drops of it thrown, however, on a genuine water surface fizzed and sputtered like red-hot iron plunged into a cool stream; and presently each was seen floating about in a self-made little cup of ice. Some alcohol poured into the mysterious fluid became promptly a solid block. Yet alcohol resists the sternest Arctic rigors, freezing, indeed, only at  $-202^{\circ}$  ( $-130^{\circ}$  C.). Removed from the oxygen, it thawed into a viscid substance, which could not be induced to burn until it had taken up heat enough to restore it to its normal consistence. The chemical inertness produced by extreme cold was further illustrated by the immersion of a piece of phosphorus in liquid oxygen. No vivid outburst of light was visible, such as marks, at ordinary temperatures, the

molecular rush together of these two eagerly uniting elements. The phosphorus remained no less indifferent than cold steel is to the contact of cold water.

The critical temperature of oxygen is  $-171^{\circ}$  ( $-113^{\circ}$  C.). Above that point it remains obstinately gaseous; interstitial movements are too active to permit its molecules to lay hold one of another. Nitrogen is still less amenable, its corresponding stage being reached only at the deeper depth of  $-233^{\circ}$  ( $-147^{\circ}$  C.). Such cold is unattainable by direct means; the intervention of liquid oxygen is required to produce it. The principle of its employment is easily explained. Mountaineers know by experience that no good tea is to be had at high altitudes, because water cannot be sufficiently heated to infuse it properly. On the summit of Monte Rosa, the boiling point is reduced from  $212^{\circ}$  at sea-level to  $185^{\circ}$ . The change is simply an effect of diminished atmospheric pressure, and can accordingly be brought about by a few strokes of an air pump with less exertion than by an ascent of fifteen thousand feet. Now, boiling oxygen, like boiling water, is colder in vacuo than in the open air—so much colder, indeed, that a temperature of  $-328^{\circ}$  is afforded by it, and this suffices to liquefy, not only nitrogen, but also atmospheric air. On June 2, 1892, the singular spectacle was witnessed during one of Professor Dewar's lectures, of common air, more than ordinarily warm and elastic owing to the heated state of the room, trickling spontaneously into an open vessel surrounding a test tube in which oxygen was boiling under exhaustion. Air, we need scarcely say, is a mechanical mixture of four parts of nitrogen with one of oxygen; and the latter, being the less refractory to cold of the two ingredients, might have been expected to condense first. Yet things happen otherwise. The two gases liquefy together, but evaporate separately. The nitrogen boils off on its own account, leaving almost pure oxygen behind. Somewhat similarly, sea water freezes

<sup>1</sup> Wiedemann's *Annalen*, Bde. xx. xxxi. xlii.

without depositing the salts dissolved in it, but abandons them in vaporizing. The analogy is indeed far from being complete; yet it serves to show that the behavior of the gases is not quite so anomalous as, at first sight, it appears.

Professor Dewar's crowning achievement, so far, has been the solidification both of air and nitrogen. A substance visually undistinguishable from ice results in each case. Unmixed oxygen refuses to freeze. Not, we may be sure, because it is incapable of assuming the solid state, but because the requisite conditions have still to be found out and produced. The incongruity is, however, noteworthy between the facility, comparatively to nitrogen, with which it liquefies, and the difficulty with which it solidifies.

And now, we may well ask ourselves, how has all this been accomplished? For surely Professor Dewar cannot, like the pedestrian soul of Elpenor, have crossed unsuccored the ocean stream that lay between him and the "regions of thick-ribbed ice" to which he has penetrated. What "white-winged ship," then, has been at his disposal? Which of the Olympians has aided him to distance his competitors in the race towards the goal of absolute cold? The business was an arduous one. Intellectual, moral, and material resources were needed for its prosecution, and needed without stint. In point of scale alone, a prodigious advance has been made. Only a few years ago a capillary tube held all the oxygen that could be liquefied at one time; and our professor himself was content to experiment upon a mere fairy thimbleful of a substance which, for rarity, might vie with "a hair from the great Cham's beard." Now it can literally be manufactured by the hog-head. At a high cost, certainly. We much doubt whether—making allowance for the outlay on the "plant"—any profit could be derived from selling it at 100*l.* a gallon; and a couple of gallons are often consumed in the researches of a single afternoon.

The most powerful apparatus ever

employed in pneumatic chemistry has been erected under Professor Dewar's superintendence in the laboratory where Davy and Faraday did their memorable work. It includes one gas, and two steam engines, four steel compressors, a couple of large air pumps, with wheelwork, shafts, and couplings *quantum suff.* The inner organic details of this machinery, however, conceal the real secret of its efficiency. They have been thought out and perfected by the application of uncommon inventive talent combined with pertinacious industry. Mental concentration has translated itself into a convergence of ingenious devices upon a single object.

The principle of the method adopted for securing its realization is that of lowering boiling points by exhaustion. Choice is made of a series of substances more and more difficult to liquefy, and each in turn is enlisted for the service of vanquishing the recalcitrance of its fellows. Thus, by successive gradations, the startling temperature of  $-346^{\circ}$  ( $-210^{\circ}$  C.) has been reached. The process (generally abridged in practice) begins with the freezing of carbonic acid through the rapid evaporation of ether. Carbonic acid boils under atmospheric pressure at  $-112^{\circ}$  ( $-80^{\circ}$  C.), but by compulsion of the air pump at  $-166^{\circ}$ . Nitrous oxide, at this stage of the descent, surrenders at discretion, and, boiled in *vacuo*, affords the means of liquefying ethylene, which, similarly treated, runs down the temperature to  $-229^{\circ}$  F. Here at last the almost irrepressible activity of oxygen particles is so much reduced that a pressure of fifteen hundred pounds to the square inch avails to bring them within the power of cohesion. The accelerated evaporation of liquid oxygen gives cold enough to liquefy air and nitrogen; and these, again, worked upon in double receivers by two potent air pumps, combine their refrigerative forces to produce solid nitrogen—an experiment successfully performed for the first time in public on January 19, 1894. It seems for the present to mark the *ne plus ultra* of what can be done

by artificial cold. One further exploit remains; but the time is not yet ripe for its accomplishment. The liquefaction of hydrogen cannot be attempted with the methods actually in use, or likely in the immediate future to be realized.

The most indispensable of Professor Dewar's cold-producing agents is ethylene, a specimen of which was exhibited by Faraday in 1845. It is a compound of hydrogen and carbon, prepared by treating alcohol with strong sulphuric acid. At the Royal Institution it is now manufactured a hundredweight at a time, notwithstanding the "hairbreadth 'scapes" by which the operation is attended unless the most delicate precautions are observed. For it is highly explosive, and the slightest leakage of the pipes through which it is conducted may at any time lead to a dangerous accident. None the less, its services are indispensable, and are availed of to the utmost. Each fresh supply is made to do duty over and over again, by being put through an incessant round of alternate liquefaction and evaporation; and nitrous oxide has a similar course of cyclical duty imposed upon it.

Professor Dewar's experiments upon liquid oxygen were, to begin with, gravely hampered by the violence of its ebullition. No single particle of it remained a moment at rest. Determinations of its qualities were as impracticable as would be delicate astronomical observations through the undulating vapors close to the horizon. But difficulties are often only a spur to invention; and they here resulted in the important contrivance of "vacuum vessels" for preserving fluids at equable temperatures. Air molecules are indefatigable carriers of heat. On every square inch of cold surface exposed to bombardment by them, they strike in billions per second, and each, as it retires, leaves behind some minute portion of its own thermal store. By hindering their access, however, the process of temperature equalization can be virtually arrested. Hence, liquid oxygen, protected by a "vacuum

jacket," shows no signs of agitation, but evaporates quietly from the surface with no very sensible waste. The vacuum is produced in the outer shell of a double receiver, from which every trace of air has been expelled on the Torricellian plan. By then freezing out the excess of mercury, an extraordinarily high degree of exhaustion can be reached. The pressure of mercurial vapor—the only form of matter remaining in a bulb thus treated—amounts to no more than the four hundred-thousandth part of a millionth of a millimetre. Yet the exterior application of a pad of cotton wool steeped in liquid oxygen promptly condenses this evanescent remnant of metallic gas into a bright mirror, just as moisture deposits itself in ice on the inside of a window pane during a night of hard frost. Through the nearly absolute void in the mirror-coated bulb an electric discharge can with the greatest difficulty be made to pass; and the difficulty might not improbably amount to an impossibility could the sparsely strewn surviving molecules be swept away. Enclosed in such vacuous spaces, liquid oxygen is virtually proof against the attacks of heat; and experiments upon its peculiarities can be conducted with ease and at leisure.

Oxygen may be regarded as the leading terrestrial element. It forms eight-ninths by weight of water, one-fifth of the earth's atmosphere, and about one-half of its rocky crust. There is, however, no certainty that it exists at depths exceeding, say, thirty miles. Oxidation is more likely to have been limited to the superficial layers of the cooling globe than to have extended to its interior. More significant to ourselves are the facts that our bodies are mainly composed of this normally aerial substance; that they are largely nourished and wholly vitalized by it. Oxygen is in great demand in the economy of nature. Most other chemical elements crave for union with it, and once they have laid hold of it, they do not readily let it go. If ever present, then, in lunar air and oceans, it may very well have been

long ago "drunk up" by chemical action. Extra-terrestrially, it occurs certainly in meteorites, and probably in some of the planets; but neither sun nor stars give any sign of being supplied with it. Dusky bands caused by its absorption are, it is true, included among the hieroglyphics inscribed on the solar spectrum; but their strictly telluric origin has been demonstrated by M. Janssen, who ascended Mont Blanc for the second time last September with a view to studying their progress towards extinction with elevation in the earth's atmosphere. The upshot was to show that, outside its limits, no trace of them would be left. They are, then, of domestic production. The sun has nothing to do with them.

These atmospheric bands and rays are common to the spectra of aerial and liquid oxygen. The same prismatic elements, conspicuously absent from the light of the setting sun, are cut out of an electric beam which has traversed a couple of inches of liquid oxygen. This identity, partially shown by M. Olszewski in 1887,<sup>1</sup> was completely ascertained by Professors Liveing and Dewar in 1889. It proves, not only that the molecules of oxygen undergo no modification of structure in liquefying, but that a nine-hundredfold condensation, combined with the restraints of cohesion, leaves them free to execute their characteristic vibrations. This "persistence of molecular constitution," Professor Dewar remarks, is the more noteworthy when it is considered that "no compound of oxygen, so far as is known, gives the absorptions of oxygen."<sup>2</sup> Not even ozone, a compound of oxygen with itself, yet showing a radically different spectrum. Liquid ozone is intensely blue. Dissolved in liquid oxygen, it

changes its clear tinge to pronounced indigo, and there can be no question but that its formation as a gas in the atmosphere must tend to deepen the blue of the sky. This, however, is probably only a subsidiary effect. The fundamental explanation of the celestial azure is to be found—according to the opinion of M. Olszewski, with which Professor Dewar cordially agrees—in the true, native color of oxygen. And its color inevitably results from the preponderance given to the blue end of its spectrum by its stoppage of many red, yellow, and orange rays.

The virtual immutability with change of state of the absorptive action upon light of gaseous oxygen corresponds with the persistence of its other qualities. After liquefaction it is as bad a conductor of heat and electricity as before, and has lost nothing of its thermal transparency. In one of Professor Dewar's striking experiments, a spherical vessel filled with liquid oxygen was made to act as a burning glass. The beams from an electric arc, brought to a focus by its refractive influence, actually ignited a piece of paper held there, while leaving the frigid lens traversed by them unaffected by so much as a momentary quickening of ebullition. Thus, radiant or ethereal heat encounters no resistance in passing through oxygen, although molecular heat, which can only creep along from particle to particle, finds the way barred almost at the outset.

Again, gaseous oxygen was known to be magnetic; but it was very far from being anticipated that liquid oxygen would prove to be still more so. On December 10, 1891, Professor Dewar placed some of this substance in a rock-salt cup between and just below the poles of an electro-magnet. No sooner was the circuit completed than, to his ineffable surprise, the liquid sprang in one mass to the poles, and remained attached to them to the last drop left by its speedy evaporation. Cotton wool moistened with oxygen clung on with equal tenacity, until sucked dry by their overmastering attraction for its contents. The magnetic

<sup>1</sup> Wiedemann's *Annalen*, Bd. xlii., p. 663.

<sup>2</sup> Proceedings, Royal Society, vol. xlv., p. 226. Renewed study, in 1892, of the spectrum of liquid oxygen disclosed to the same investigators alterations in the well-known bands called by Fraunhofer A and B, which, in their opinion, "ought to throw some light on the nature of the changes in passing from the gaseous state, as well as on the causes which produce the sequences of rays which are called channelled spectra." (*Phil. Mag.* August, 1892, p. 207.)



capability of liquid oxygen is, indeed, only one-thousandth that of iron; yet its discovery is of far-reaching consequence.

Liquid air appears to possess no distinctive qualities. It is magnetic just in proportion to the amount of oxygen entering into its composition; its spectrum is that of oxygen, weakened; its color is that of oxygen, attenuated. The part played by nitrogen is that of a simple diluent. Nitrogen is the most indifferent of substances. Its characteristics are mainly negative. It refuses to conduct heat or electricity, but it allows radiant heat and light to pass without exacting any dues of absorption. Chemically inert, it combines even with oxygen only under the stress of electric excitement. Were it otherwise, it could not discharge the function of neutrality assigned to it in our atmosphere. In every thunderstorm, it is true, a small quantity of nitric acid is formed, which, carried to the ground by rain, and absorbed by plants, helps to supply the nitrogenous foodstuffs indispensable for the maintenance of animal life. This fertilizing action of electricity is of recent detection. It might be deemed superfluous, were vegetable organisms capable of appropriating nitrogen directly from the air; but, as a matter of fact, they derive from the soil their stores of this much needed material.

The production of excessively low temperatures means much more than the performance of just a feat of arms in a scientific campaign. Liquid oxygen and solid atmospheric air are indeed trophies of a victory over nature; they represent the accomplishment of what, in the regular order of things, was especially designed to be impossible; but they represent much besides. For they are instruments of research as well as objects of curiosity. Under normal conditions at the surface of the earth, it is impossible to gain any thorough acquaintance with the essential characteristics of matter. The constant aim of physicists has accordingly been to widen the scope and vary the circumstances of observation. To effect

this they have invoked fire and frost, they have piled Ossa upon Pelion in the production of mechanical pressure, they have come appreciably near to expelling the last molecule from otherwise vacuous spaces, they have invoked as allies the still obscure forces of electricity and magnetism, they have concentrated and analyzed light, they have dug deep into the solid earth, they have explored the abysses of the distant heavens,—

Medias acies, mediosque per ignes  
Invenere viam.

The general problem thus attempted to be solved is one which must fascinate the curiosity of every thinking mind, although it trenches—indeed, partly intrudes—upon the realm of the unknowable. What is the material basis of phenomena? philosophers and physicists alike ask themselves. Abstract force from matter, and what remains? Something that has mass, we can reply without hesitation; something that resists being set in motion when at rest, and being brought to rest when in motion. But this something can have no weight, since gravity is a force; it must be devoid of consistence, because destitute of cohesion; it should be impalpable, since resistance to pressure implies activity, not mere passive impenetrability. To designate this *caput mortuum* “cosmic dust” does not go far towards explaining its real nature, which must, indeed, forever remain imperfectly known to us owing to our incapability of conceiving matter apart from force, or force apart from matter. The nearest way to the heart of the question, however, lies undoubtedly through the study of the relations of matter with heat. Matter, in a sense, lives by heat. All its transformations are effected, all its activities come into play, under thermal influence. What, then, would be the result of its total withdrawal?

There must be a lower limit to temperature. For temperature measures molecular energy of motion; and since this motion decreases regularly with the progressive diminution of heat, we

cannot but infer that decrease must, at some point, terminate in disappearance. Again, every perfect gas, such as air, contracts in cooling by one four hundred and sixtieth of its own bulk for each degree of Fahrenheit. The process, however, should necessarily come to an end when the gas had ceased to possess any sensible volume. If it went on uninterruptedly, this should occur at  $-460^{\circ}$ . That is to say, the reading at the bottom of the tube in an air thermometer similarly graduated throughout, is  $-460^{\circ}$ . We now know that this theoretical shrinkage into nothingness could never take place, since the air would solidify long before the zero point was reached. But the inference is not thereby invalidated that the "death of matter" through total deprivation of heat should come to pass at a temperature of  $-460^{\circ}$  ( $-273^{\circ}$  C.). Several distinct lines of inquiry, besides, converge towards this point of "absolute zero." It is unlikely—perhaps more than unlikely—that it can ever be experimentally attained. The absolute, in any form, evades definite grasp. The recognition of an unconditional scale of temperature is, however, of great importance in many physical inquiries, and is fully warranted by facts. Meantime, the pulse of heat, although probably incapable of being actually stopped, has been brought, in the laboratory of the Royal Institution, to beat very low. With what effects upon the properties of matter we have just begun to learn; for Professor Dewar regards himself as only on the threshold of the inquiry. His masterly discourse on "The Scientific Uses of Liquid Atmospheric Air," delivered January 19 last, was nevertheless conclusive on some points, and highly suggestive on many more. The unearthly substance in question is now so entirely at his command that he can employ it freely as a refrigerating agent. Matter cooled down to  $-328^{\circ}$  can thus be examined under all its varied aspects, and carefully compared with matter at  $+50^{\circ}$ . The differences are instructive.

Tensile strength, to begin with, is very considerably augmented. Metals immersed in liquid air break much less easily than at ordinary temperatures. Some of them—iron and German silver, for example—bear a doubled strain. Their structure is stiffened and toughened by the unhindered play of molecular attractions. This is only what might reasonably have been expected. Cohesion and heat are naturally antagonistic. Under the influence of the former, matter contracts and hardens, collecting its forces into closer array. Surrendered to that of the latter, it expands, softens, and offers an impaired resistance to mechanical stress. Cohesion draws particles together, heat drives them asunder. It wings them with disruptive velocities, and urges them towards indefinite diffusion.

The magnetic quality of liquid oxygen is no isolated phenomenon. Susceptibility to this particular kind of action grows steadily and generally, so far as is yet known, with decrease of temperature. The cause of its growth with great cold is as little known as the cause of its decline with great heat. It is a familiar fact that iron at a temperature of about  $1400^{\circ}$  is no more magnetic than timber or glass; and nickel ceases at  $340^{\circ}$  to respond to the most powerful magnet. The theory that the sun is the centre of a vast magnetic field thus encounters a serious difficulty in its enormously heated condition.

The law connecting electric resistance with temperature is much less uniform in its operation. Metals untainted by any trace of a foreign ingredient conduct better and better as they are more and more chilled. Professors Dewar and Fleming state that—

The electrical resistance of a given pure iron wire at  $-323^{\circ}$  ( $-197^{\circ}$  C.) is only one twenty-third part of that which it is at  $+212^{\circ}$  ( $100^{\circ}$  C.). In the case of pure copper the ratio of resistance is about one to eleven for the same change of temperature. The very smallest impurity greatly affects this decrease. For the perfectly pure metals, therefore, it seems probable that, as

the temperature is lowered towards the absolute zero, the specific electrical resistance decreases, so that it either vanishes at the absolute zero or reaches a very small residual value.<sup>1</sup>

This inference, however, by no means applies to alloys. Their conductivity is but slightly affected by temperature, especially when their components are chemically unlike. German silver and platinum silver belong to this category. Where the alloyed metals, on the other hand, are similar, as in platinum iridium and platinum rhodium, resistance falls off notably with cold, although in a far inferior degree to that observed in pure metals. There is accordingly no sign that it would vanish at the absolute zero. The law of change in metals is, moreover, actually reversed in certain non-metallic substances. One of these is carbon. Its faculty of electric resistance increases continuously with the withdrawal of heat, while at the temperature of the electric arc it is virtually null; the current traverses the terminals unopposed. Insulators, such as glass, guttapercha, and mica, will probably be found to behave similarly; but they have not yet been tried over the same wide thermometric range. These diversities illustrate the extreme complexity of the relations in which matter stands to heat and electricity, and might well reduce the most intrepid speculator to despair of combining them in a valid generalization.

Chemical affinity is usually rendered more effective by heat; we are, then, not unprepared to find it quenched by cold. Exceptions to this rule may, it is true, eventually be brought to light; yet it can scarcely be regarded as contravened by the continuance of photographic action at the temperature of boiling oxygen. For the alteration brought about by the impact of light on a sensitive plate consists mainly in the shaking asunder, through the added intensity of their vibrations, of the

silver salts with which it is charged. The effect is of a mechanical rather than of a chemical nature. We have yet to learn whether photographs can be developed, as well as successfully exposed, at an abnormal degree of cold. If so, it will follow that genuine chemical processes can be carried on until universal congelation sets its seal upon nature.

The effects of cold upon color are extremely curious. At  $-314^{\circ}$  sulphur turns white; the intense yellow of bichromate of potash vanishes; vermilion fades to pale orange; ferric chloride loses its deep red, a solution of iodine in alcohol its rich violet. With the return of heat, however, all these substances fully regain their former hues. Blue tints, no less than organic colors of every shade, appear indifferent to temperature. In this novel and interesting field of research, Professor Dewar has up to the present made only a few pioneering experiments. Their results could not possibly have been foreseen, and stand isolated from previously ascertained facts. Yet they are not unlikely to mark, in future retrospects, the beginning of a new era in the science of chromatics.

Nor could it have been anticipated that life, albeit in its humblest forms, could survive a plunge to the frigid depth where oxygen simmers in a vacuum-coated vessel. Nevertheless, the spores of microbes and the seeds of many plants have been exposed by Professor McKendrick to this searching ordeal without detriment to their vitality. Plausibility has thus apparently accrued to Lord Kelvin's fanciful surmise as to the meteoric origin of life on our globe. For it can no longer be maintained that germs contained in or adhering to meteorites must necessarily have perished in the cold — approximating, however closely, to absolute zero — of interstellar space. Other objections equally formidable with the one disposed of might, indeed, be raised. But the speculation is no more than a toy of thought. It would be breaking a butterfly on a wheel to attack it seriously.

<sup>1</sup> *Philosophical Magazine*, October, 1892, p. 334. See also the same authors in the same journal for September, 1893, p. 272.

Professor Dewar's astonishing success in working at low temperatures has made it possible to gather at least a preliminary notion of the state of matter left inanimate by the complete, or nearly complete, withdrawal of heat. It would certainly *not* slip away into a metaphysical abstraction. On the contrary, it would become "sterner stuff" than we are accustomed to find it. The hypothesis of disintegration by cold may be relegated to the further side of the moon, or any other "bourne from whence no traveller returns." For us sublunarians it has ceased to be a profitable subject of discussion.

The same inexorable grip of cohesion, imparting to various kinds of substance an adamantine hardness, would effectually prevent any change in their mutual combinations. The chemical *status quo* should be perpetuated endlessly. Affinity, if it still subsisted, would be powerless to act. Its operation is, for a contrary reason, prevented by intense heat. The molecules are in the one case bound as with iron bands, in the other they are agitated by movements uncontrollable by either chemical or cohesive forces. Heat, moreover, breaks up compounds formed at lower temperatures, and when raised to a high pitch tolerates the existence only of simple substances. But cold has no dissociative influence. We have seen that it respects even the mechanical mixture of oxygen and nitrogen in our atmosphere, and that salt water makes salt ice. If, then, our earth, which in pre-geological times was probably too hot to hold any but elementary kinds of matter, could be transported to interstellar space, its component substances — minerals of all kinds, earths, oxides, and water — would harden into rigidity and inertness, but would suffer no chemical alteration. The aqueous vapor and carbonic acid of the atmosphere would instantly come down as snow; while its oxygen and nitrogen might liquefy as a preliminary to crystallization. Their united solid bulk would, at any rate, encase the whole globe in an icy shell eleven or twelve yards in

thickness. Owing to the thermal transparency of its materials, this could not be melted even by the passage through it of the large stores of subterranean heat continually dispersed abroad by radiation. Under these circumstances, then, the earth might be irretrievably congealed on the surface, while still white hot within.

There is still one gas unsubdued by cold. Hydrogen has never been liquefied. Contrary statements are, it is true, often met with, but they are founded on mistaken interpretations of illusory appearances. Nothing is more certain than that as far as  $-346^{\circ}$  ( $-210^{\circ}$  C.) the actual limit of downward exploration, this most elastic of substances demeans itself as a perfect gas. It faithfully obeys the "gaseous laws" of regularly proportionate diminution of volume with increase of pressure or decrease of heat, and can hence be relied upon to measure degrees of cold sufficing to liquefy oxygen and solidify nitrogen. Below the freezing point of mercury, Faraday used an alcohol thermometer; below the freezing point of alcohol, Professor Dewar has recourse to a hydrogen thermometer. This would be unsafe if the critical point of the gas had been reached, since at all lower temperatures it would be in a vaporous state, and liable to irregular changes. Before adopting it as his guide, the skilful experimenter at the Royal Institution made quite sure, it need scarcely be said, that he was placing himself at the mercy of no such caprices. Hydrogen, then, has never, within mortal ken, existed as a vapor; at  $-346^{\circ}$  it is no less ethereal than at  $+50^{\circ}$ . Its critical temperature is, indeed, placed by estimation at the depth of  $-400^{\circ}$ , while its computed boiling point is  $-418^{\circ}$  ( $-150^{\circ}$  C.). Now, if hydrogen could be liquefied, it could be evaporated under exhaustion, and thus a temperature would be realized not more than about  $30^{\circ}$  F. above absolute zero. Will this ever be effected? It remains doubtful. The most sanguine investigators dare not reply positively in the affirmative. The lowest point yet attained stands

54° higher on the scale than the point at which this refractory gas might be forced by pressure to assume the liquid form; and the bridging of the gap is not now feasible, nor visibly likely to become so. Before this one closed door science pauses baffled. What secrets lurk behind it can only be divined. Were it thrown open, it would become possible to trace with confidence the symptoms of the imminent "death of matter." As it is, we can only assume that they are simply an accentuation of those observed at the temperature of liquid air. But assumptions seemingly well warranted are not always borne out by facts. The relations of matter and force are of extreme intricacy. It is impossible to make sure beforehand that they vary by prescribed gradations. The so-called "law of continuity" is no law at all, but an observed sequence over a limited range. The flow of change may proceed smoothly for a time, then suddenly, like that of a river at a cataract, become precipitate. Such a cataract may conceivably be interposed between the present halting place in descent and the ultimate low level of no temperature.

Hydrogen occupies a unique position among terrestrial substances. Although the lightest of gases, it possesses unmistakable metallic properties. Like metals, it is strongly electro-positive; like metals, it is a conductor of heat and electricity, improving in this respect with increased density, while other gases conduct worse the more closely their particles are concentrated. It forms, moreover, true alloys with palladium, sodium, and potassium. Upon these facts Faraday based the prediction that solid hydrogen would show the texture and lustre of a genuine metal. In that case water should be regarded as a metallic oxide — as a kind of *rust* of hydrogen. In its formation, one recalls with ever renewed surprise, oxygen and hydrogen together liquefy spontaneously, and at a high temperature; yet they can scarcely be induced to do so separately by the sternest coercion of cold. Chemical and cohesive changes of state are in-

deed profoundly, although inexplicably, different.

The intensity of chemical action can be measured by the enormous liberation of energy attending it. Expressed in mechanical terms, the combination of one pound of hydrogen with eight of oxygen is equivalent to the lifting of a mass of forty-seven million pounds one foot from the ground; and a precisely equal outlay of energy would be needed for the decomposition of the nine pounds of water resulting from the former process. In the first case, that is to say, work is done *by* the force which we call affinity; in the second, work is done *against* it. The late Professor Tyndall might well say that he did not "overrate matters" in asserting "that the force of gravity, as exerted near the earth, was almost a vanishing quantity in comparison with these molecular forces."<sup>1</sup>

In the same nine pounds of water the work of overcoming cohesion by converting it from ice (at 32° F.) into steam, would be about one-sixth that of resolving it into its primary elements. But the strength of affinity and cohesion varies to a very wide extent, both relatively and absolutely, in different bodies. The circumstances, too, under which each comes most fully into play are strongly contrasted. With decrease of heat chemical transformations come to a standstill, while cohesion grows to be overmastering; and temperatures high enough to nullify cohesive often favor chemical action, although both are equally in abeyance when heat becomes excessive. In the sun, accordingly, the various species of matter remain apart, their combinations being apparently rendered impossible by heat; in the moon, on the contrary, their affinities are most likely paralyzed by cold. The middle stage, where association and dissociation alternate with every undulation of change, is occupied by our own planet, as well as — we cannot but infer — by every other home of organic life.

By Professor Dewar's researches

<sup>1</sup> Heat as a Mode of Motion, p. 149.



some approach has for the first time been made to realizing, in the laboratory, interstellar conditions. His account of what they involve sounds to unaccustomed ears like the story of a voyager's experiences in another world. And these conditions are in a sense permanent. They can henceforth be reproduced at will. The power thus obtained of carrying out extensive investigations at a temperature not far removed from absolute zero constitutes an inestimable addition to the resources of physicists. A method pregnant with discovery is placed at their disposal. The field before them has unexpectedly widened. Suggestive intimations spring up on all sides as they enter it. Many significant results have already accrued. A clearer notion as to the nature of matter has unquestionably been gained; some beginning of an insight into the mutual relations of the forces affecting it seems at any rate close at hand; unlooked-for phenomena have been disclosed; vague speculations have been replaced by legitimate inferences. And this through a bare survey of the rich territory just annexed by science. That its cultivation will bring in a plentiful harvest cannot be doubted. The seed is, indeed, springing under our eyes; it remains for the future to watch its growth and garner its sheaves.

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THE DEAN OF KILLERINE.

BY THE ABBE PREVOST.

1765.

TRANSLATED BY MRS. E. W. LATIMER.

PART SEVENTH.

I RETIRED to rest under the roof of our friend Anglesey. I felt thankful for our deliverance from Lord Lynch, and was full of happy auguries for the future, but I could not sleep, my mind reverted to Ternemill and Rose. I pictured the anxiety they must have felt when Joe reported what he knew of the misadventure that had befallen us. I got up and wrote them a long

letter, to which next morning Mademoiselle de L—— added one from herself to Rose.

I had a hundred louis with me, and at once placed a sum at Mademoiselle de L——'s disposal sufficient to supply her present necessities. I also engaged a maid to wait on her and to accompany her to France, whither I intended to get back as soon as we could. This, however, was not easy, for war was on the point of breaking out between France and England, and Anglesey told me, laughing, that he would take no steps to facilitate our departure. One day, however, he rode over to the residence of Lord Lynch and returned, bringing a letter addressed to myself by that nobleman. Anglesey told me that Lord Lynch's servants were in the utmost perplexity and confusion. The manner of our escape was still a mystery. They had not dared to inform their master that anything had gone wrong, not wishing to add to his afflictions and anxieties, he being in Dublin Castle awaiting his examination, which might possibly result in an indictment for high treason. One of the men who had been with us during our journey had been sent to Dublin as soon as we landed in Ireland, and had given him good news of our safe arrival. He had at once written me this letter, and prayed me to send him an immediate answer.

The letter was a long one, and in some parts it moved me to compassion. It was an attempt to excuse himself for his conduct,—to justify it by his ardent affection for Rose. It ended by assuring me that, in spite of the unjustifiable language he had used towards me, he had never ceased to feel for me respect and veneration; and he implored me to say to my sister that he flung himself at her feet, entreating her to forget his offences, and to point out to him any way in which he could atone for them, and make her happy.

To this he added a few words about himself and his present situation. His enemies had inspired the government with suspicions of his loyalty, and, as he was known to have had communica-

tions with the court of King James at Saint Germain, the consequences to himself might be very serious. He went on to ask my advice as to how he might appeal to the members of the Court of Justice that would interrogate him, and added that perhaps my experience in my own case and in Patrick's might make it possible for me to do something for his defence; and had it not been that my sister must need my protection and my presence, he would have asked me to come over to Dublin at once, and see what I could do for him.

His letter touched me. He had, I could not but confess, some wrongs to complain of at our hands. He had not carried off Rose when she was living unprotected in her lodgings. I might help him now that his life was possibly in danger. The viceroy knew me and had expressed esteem for me, I also knew the leading men in his Court of Justice, and I had had experience in matters of the kind. I determined to go to Dublin and see what I could do for Lord Lynch, remembering that we are, as Christians, bound to help our enemies.

I therefore told Mademoiselle de L—— that I thought I might safely leave her in the care of Mrs. Anglesey. To this she assented. I left her without anxiety, nor did she feel any.

How could I have foreseen what was to happen? How could I have divined that Anglesey, in his eagerness to give us pleasure, had written to Patrick informing him that Mademoiselle de L—— and I were at his house, and urging him to come on and take us by surprise?

This being unknown to me, I left Mademoiselle de L—— with such confidence that on my way to Dublin I began to think how easily I might get to Antrim, and there see my dear flock and my beloved brother, after I had passed a few days in Dublin, and done all in my power for Lord Lynch.

I found that nobleman overjoyed to see me. It was some time before he would let me speak. "You think," I said, "that my sister is in Ireland."

Your people have not thought it best to undeceive you. They faithfully executed your orders, but they made a great mistake. The lady whom they brought away with me is one whom you have never known. Thank Heaven, she is now in safety! Some persons in my place might have reproached you, but I came hither for other reasons. I think, as you do, that I can be of use to you, and the zeal with which I hope to succor you will show you, I trust, how as a Christian I can forgive."

I spoke thus in all seriousness, but Lynch took what I told him as a joke. Nothing could persuade him that I was not playing him a trick. He refused to believe that Rose was safe in France, and that I was really actuated by motives of Christian kindness and generosity.

I gave the matter up at last, and occupied myself only with his deliverance from his dangerous situation. He had been, it was true, to Saint Germain, but he was so out of favor with the king of France that he dared not even remain in his dominions. He had given proofs of his fidelity to the existing government of Ireland by his wish to espouse an Irish lady and to settle down on his estates in Munster.

I drew up a memorial stating all this, and presented it to the viceroy. I had observed on former occasions that the viceroy was much disposed to favor the Irish nobility, and that though his fears of the displeasure of his government made him listen to accusations against gentlemen of noble birth, he did his best after their arrest to save them. However, it was not in his power to discharge a prisoner of State; he could only send him before the Court of Justice to which I had addressed so many supplications on Patrick's behalf. I was received by the gentlemen who composed this court with great respect. I know not whether I owed my success to their remembrance of me on a former occasion, or to the secret influence of the viceroy. However it was, I obtained Lord Lynch's release.

His first thought was to return home, where he expected to find my sister. He was a little startled when I refused to accompany him, telling him I was going to Antrim, but he recovered himself, being persuaded that I was going to take some short route so as to arrive at his house before him. He answered me, laughing, that we should see who would get there first, and so we parted, he going south, whilst I took the road to Killerine.

It was night when I reached the residence of Patrick, but the moment I knocked the gates flew open as if people were expecting me. I no sooner, however, entered the courtyard than I perceived that my arrival was a disappointment.

The servants were all strangers to me. I asked for their master, and was told he was absent. It was evident to me that when I knocked at the gate they had opened it in the expectation of seeing him. I heard one man say to another, "How my lady will be disappointed!" The servants seemed all so preoccupied, and so bewildered, that they paid me little attention. I stood in the courtyard, apparently unnoticed, until a man appeared who knew me, and then everything was changed. They all crowded round me, filled apparently with hope and joy.

As the master was absent, I asked to see my sister. She had just heard that it was I who knocked so late. I found her in bed, where she told me she had been for the past week. She appeared at first very glad to see me, then interrupting herself in her expressions of delight, she asked me what news I had brought her from her husband. "I have only just come into Antrim," I answered. "I have not even stopped at my own door." This answer seemed to distress her greatly. She did not speak for some time, and I could see her tears fall. I dared not ask her the cause of her affliction. I knew her too little to claim her confidence. She merely told me that my brother had been away a week, and had not written to her. I answered that a week was a short time, and that

his silence need not cause her any anxiety. Then I went on to tell her about Rose's prospects, and of our fortunes in France. She listened with great interest, and I hoped that what I said might divert her thoughts from her own sorrows.

I no sooner found myself in my own room than I sent for Patrick's *valet de chambre*. He had been a long time in my brother's service, and I knew him to be an excellent man and devoted to his master.

I began by saying how sorry I was not to find my brother at home, when I could only remain a very short time in Ireland. The man's look was so sorrowful that I went on and asked him the cause. At first he seemed to hesitate how to answer me. Then, carefully shutting the door, he came close up to me, and said, in a low voice: "I believe I ought to tell you everything. Perhaps Providence has sent you to this house at this moment. I am not sure but that I ought to have taken my pen and told you what I have to tell before; but I was not sure how far my duty to my master would justify me. He used to tell me everything; but since his marriage he has never admitted me into his confidence. All I know has come from my own observation."

"I knew, of course, of his first and only passion. I felt that nothing could make him cease to love Mademoiselle de L—. I wondered how, when he yielded to your wishes, he could expect ever to be able to fulfil his obligations to any other woman. He must have great strength of will to have lived up to his duty even so far as he has done. He was ill for some weeks after you left Dublin. Whenever he could get a few moments unobserved by her ladyship, he was writing letters. These he gave me to put in the post. One was to M. des Pesses, the other to Mademoiselle de L—. They were unsealed. My compassion for my master, and my desire that he might find what happiness he could in his marriage, made me think it was no harm to read them. They were piteous

letters. They brought tears into my eyes. I thought to myself that the sooner all intercourse between my master and his lost love was broken off the sooner he would be resigned, and begin to love my lady. I did not send the letters. I destroyed them. But I wrote to some of M. des Pesses' men, and asked news of their master.

"After these letters were written, and his lordship supposed them to have been sent, he became less unhappy. My lady never left him if possible, loading him with cares and kindness, which he found it hard to bear. He seemed to care for nothing but solitude, and at last she grew fearful of disturbing him. We left Dublin after a few weeks, but nothing changed when we arrived here. My lord has pleaded illness as an excuse for delaying the obligations of his marriage. The doctors ordered him to hunt, and though he never before had cared for field sports, from morning till night he was in the saddle. It was merely an excuse for finding his way to lonely places, while the men who were with him pursued the game. After a while my lady took a fancy to hunt too, and then he seemed to select the most inaccessible places to which to drive the game, places to which no woman could follow him. Yet he always treated my lady with consideration, and occasionally I have witnessed little scenes which made me hope that he would not be always insensible to the fondness that she showed for him. I said to myself, 'if he could hear that Mademoiselle de L—— was dead, or was married, he might forget her and be happy.' May Heaven forgive me! My master, who had been looking anxiously for answers to his letters, discovered one day that I had received a letter from Paris. It was from a servant of M. des Pesses. I informed him that it told me that M. des Pesses had got back to Paris, and that Mademoiselle de L—— had married a German nobleman.

"This news, alas! threw his lordship into a state of terrible agitation. He was almost beside himself. Never-

theless he showed some self-control, till the day came which brought about my ruin, and possibly his own.

"We were out hunting. The chase brought us near Londonderry, when, as we crossed the highroad, we saw coming towards us a gentleman on horseback followed by a servant. My master knew him at once, and so did I; it was M. des Pesses. I had little time to say to myself, 'what will result from their meeting?' — the friends were in each other's arms. My lady was forgotten, left alone with her servants on the highway. The two gentlemen dismounted, and, sitting on the grass, as I learned afterwards from M. des Pesses' servant, M. des Pesses informed my master of all that he had done in Germany; that M. de L—— was dead; and his daughter on her way to Paris, anxious to bestow on him her fortune and her hand.

"His lordship sat and listened like a stone. He even read a letter from Mademoiselle de L—— without a word. Then he seemed to lose consciousness. I approached to render him some services. He recognized me. He resented my presence, he ordered me fiercely never to appear before his eyes again.

"M. des Pesses recognized me, and taking me aside asked me the meaning of what he saw. I told him that my master had been married more than two months. M. des Pesses was greatly grieved, but my lady coming up, he addressed her with all politeness, making some excuse for the condition in which she found my lord.

"M. des Pesses stayed with us only three days, endeavoring to reconcile his lordship to what had befallen him, but in vain. My master remained silent, indeed he seemed to be hardly in possession of his right mind.

"Alarm and distress reigned in the household, and ever since my lord has been nearly in the same state. Her ladyship would come many times a day to the door of his apartment, but he would seldom see her. When he did he received her with forced politeness, which made her weep bitterly when

she went away. I was at first afraid to show myself, but, finding that he had great need of my services I went to him as usual, and he made no objection, though I could see he would never again trust me or believe in my devotion.

"Her ladyship, who attributed the terrible change in her husband to the influence of M. des Pesses, showed so clearly what she thought, that, as I said, that gentleman went away. What passed between him and my master at their last interview, I do not know. Perhaps he resented his reception, for he has never written since his return to Paris, nor have we received news of him.

"Meantime her ladyship became more and more anxious. The mysterious behavior of her husband roused her suspicions. Those suspicions were confirmed when she one day discovered, and read, Mademoiselle de L——'s letter. She had seen it often in her husband's hands. In her rage and her despair she tore it to pieces.

"The consequences of her discovery of this letter were as fatal to herself as to my lord. She shut herself up in her own room. She would not eat. She would hardly allow her woman to come in to her. Husband and wife were each, as it were, shut up in a tomb; nor did they seem to care even to inquire for each other. His lordship, having searched in vain for his precious letter, no doubt guessed its fate.

"Mr. Dilnich one day rode over to our house. He was too much at home there to use any ceremony. He went at once to my lady's chamber, and was astonished to find her in a deplorable state, of both mind and body. Then he questioned the servants, but he learned nothing, save that they believed it had something to do with some letter. My lady told him nothing.

"Then he went to see his lordship. I do not know what passed between them at first. Mr. Dilnich is hot-headed. From what he saw, or from some other cause, he fancied that my lady had been ill-used by her husband.

Angry words passed. Both drew their swords. I tried to part them, but could not until Mr. Dilnich had received a slight wound in the arm, and my master was wounded in the thigh.

"Then Mr. Dilnich, ashamed of himself no doubt, at once, without a word, quitted the house. His lordship's wound was not severe; there was no need to call in a doctor; and in a few days he was able to go about again. But the wound had its consequences. Up to that time he had treated her ladyship with tenderness, consideration, and a sort of compassion — now he seemed furiously enraged against her. I am certain he believes that she set on Dilnich, who is her uncle, to attack him in his chamber.

"But a letter he received a week ago made a great change in him. He took horse and set out at once upon a journey. I do not think he took any leave of my lady, but I have lost his confidence. He chose another servant to go with him. My lady has been ill ever since he left. We are all greatly concerned for her, and when you knocked late at night, we were all sure it was our master. We can but hope that you may be able to comfort her."

I only understood part of this story. I knew Dilnich to be a man of quick temper, but I thought him also a man of good sense and of correct behavior, and I could not understand how he could have acted like a cut-throat in a friend's sick-room.

I agreed with a remark made by the *valet de chambre* that any one who from a sense of duty is waging war with passion in his heart, will grasp at any excuse for his own weakness; but I feared that if Patrick had any just cause for anger against his wife, I should find it harder than I had thought to bring him to reason.

I praised the valet's zeal and affection for his master, and assured him I would do my best to reconcile my brother to him. But that night was the most terrible I have ever passed. I debated with myself whether I ought, or ought not, to speak to my sister-in-law of her relations with her husband,



and if I did, how should I open the subject ?

After a sleepless night I was dressing myself leisurely, still thinking upon this subject, when they came to tell me that Dilnich wished to see me. He lived near and had heard of my arrival. I could not refuse to see him.

He embraced me affectionately on entering, and at once begged me to listen to what he had to say. He began by speaking of my brother's coldness towards his wife, and then of the duel of which he spoke with much shame and compunction. "Yet," he said, "I want you to hear what led me to accuse your brother of perfidy."

Then he told me that having written to Fincer, who was in Denmark, a full account of his daughter's marriage, he had received a letter in reply, which had filled him with astonishment. It seems that Fincer, having gone to Hamburg, had there met M. de L—— and his daughter. Had indeed seen a good deal of them. One day he had expressed to M. de L—— his surprise at the indifference showed by the young lady to many good offers of marriage, when that gentleman told him all about her affair with Patrick. Being somewhat curious to know how it would end, and having made friends with Madame Gerald, he heard her account of it as well. Not long after this M. de L—— died ; then he heard from Madame Gerald, of the arrival of Des Pesses, and of the resolve of the young lady to go back to Paris at once, where she expected to meet her lover. Fincer told Madame Gerald that Patrick was in Ireland. She said they knew it, but that as soon as he received letters from them he would hasten to meet them in France. He had sent his best friend to Germany with assurances of the constancy of his attachment. The next thing Fincer knew was that his own daughter had married this young man, — a man engaged to another woman, who confided in his constancy and honor. He was naturally furious, and suspected Patrick of a base design of securing his daughter's fortune, and deserting her after

he had obtained possession of her wealth. Such things were done in Ireland at that day, but not by a man of Patrick's birth and character.

Fincer had requested Dilnich to watch over his daughter, to observe how she was treated by her husband, and, above all, to find out whether he was converting her property into ready money.

"Now think, my dear dean," said Dilnich, "what anxiety this letter must have cost me. I have not told my niece anything about it, but all I have seen has corroborated its statements : the arrival of a stranger, the unhappiness of Sara, and all that I have heard of the disorder and unhappiness reigning in this household. No wonder I said things to your brother which made him very angry. I have not seen him since ; but I have seen my niece. She seems to me very unhappy. Perhaps you can bring back peace into this distracted family."

I was obliged to confess that there was some truth in the facts contained in Fincer's letter ; but I was able to set Dilnich right on many points, and to exonerate my brother.

Dilnich confessed that he had had great difficulty in believing Patrick guilty of any meanness. We embraced each other at parting, I promising to do all in my power to bring about happier relations between husband and wife, adding that I was sure all Patrick needed was some earnest exhortations from me to induce him to act up to his duty ; and, indeed, I would have pledged my life on his virtue and his honor.

This confidence, alas ! was the prelude to fresh sorrows.

I was sitting with Dilnich a few days later, when a letter was brought in addressed to me at Killerine. The handwriting was that of Lord Lynch. It was very short. He said he wished me to know that nothing prevented him from seeking an occasion to fight Patrick but a sense of the great obligations that he was under to me ; and he hoped that I would impress my brother with a sense of moderation

and justice if I wished to avoid fatal consequences.

"Oh, God!" I exclaimed; "hast thou opened new pitfalls before the feet of one who was striving to avoid them?"

After uttering these words aloud, I was forced to tell Dilnich something of the contents of the letter. "It informs me," I said, "where I can find Patrick; and I must set off immediately for Dublin. He has a quarrel with Lord Lynch." Dilnich wanted to accompany me. "No," I said, "I had better go alone. You can tell my sister-in-law that I will return in a few days, and bring her back her husband."

I set off instantly. My haste was so great that I travelled day and night, and the second day I had knocked up my horses. I spent twenty-four hours in securing others. Those twenty-four hours had a great influence on several lives.

At last I reached the residence of Anglesey, and was received by his mother and her servants with such solemnity that I was sure I must listen to bad news. Bad indeed! The day before Mademoiselle de L—— had left for France in Patrick's company. Patrick had been obliged to quit Ireland at once, having mortally wounded Lord Lynch in an encounter, and Mademoiselle de L—— had made use of his escort to return to her own country. Anglesey, also, who had long wished to travel, had gone with them, and his two sisters.

The old lady had done all she could to dissuade her daughters. She knew nothing of the fatal duel with Lord Lynch, except that he had been the aggressor. She surmised, however, that Mademoiselle de L—— might have been its cause. Patrick had reached their house two days after I left it. They had been charmed to see him, and everything had gone on pleasantly till after the return of Lord Lynch. Then suddenly all the party had taken a resolution to go to France. She had heard nothing of the duel till after their departure. Her daughters promised to be back within a year, unless,

meantime, they had secured suitable establishments in France.

I went to my room. I flung myself upon my knees. "Oh, God of heaven!" I cried, "thy help and thy protection are my only hope. Ah, what can be done for Patrick?—what for his unhappy wife? O, God! show thy power in this extremity. The cup of our family misfortunes is now full!"

Then I thought of Lord Lynch, and went to inquire for him at his house. His servants told me he was dying, but would probably see me. I found him endeavoring to dictate a letter. He rallied all his strength, and begged me to hear him.

"When I found out the truth from my servants on reaching home," he said, "I was ashamed of having disbelieved you. Yet still I hoped it might be your sister who had been brought over with you from France, and having learned from my servants that you had probably found an asylum at Anglesey's, I rode over there. I found, indeed, that the lady in question was a stranger to me, but I also heard that Patrick had been there two days, and I was anxious to see him, that I might express to him my sense of the obligations that I owed you. He received me much more cordially than I expected, for I feared he might resent your abduction as an outrage; but he laughed over its success, and I passed the remainder of the day delightfully in agreeable company. Must I tell you that the charms of Mademoiselle de L—— made a profound impression on me, and that I returned home thinking only of her beauty? Perhaps you are surprised at this; but remember how discouraging to my suit had been your sister—how little I could hope my love would be returned!

"I have not strength to tell you my story at great length. After a few days I spoke to Patrick. Instead of finding him glad to know that I renounced my pretensions to his sister, I found him haughty, defiant, almost insolent when I spoke of the admiration I had conceived for Mademoiselle de L——.

"A day or two later I met them walking in close converse in the park, and then the truth flashed on me,—your brother was my rival. Mutual jealousy soon led to a dispute. I challenged him by a sign. He followed me to a wood. We fought. I was too furious to be upon my guard. His sword passed through me, and I fell. I own with shame that could I have reached my sword, which had flown out of my hand, I would have stabbed myself, and died there where I lay. He penetrated my design, and kicked the weapon out of my reach. Help came, and I was carried to my own house, whence I sent word to your brother that as a dying man I forgave him.

"I have had strength to live longer than I thought, and was dictating a letter to you when you arrived. You know about the treasure. I have no Catholic relations to whom I care to entrust the secret. I confide it to you. Do with it whatever your sense of what is right to God or man may suggest to you. You may think it best to give it to King James, to whom I have already offered it, or employ it for God's service in other ways. My mother's jewels I destined from the first moment I saw them to your sister. Accept them on her part, and may they help her to forget the many things I have done to make her hate me. Alas! all my life what I have done seems only to have turned people against me, instead of ending in happiness to myself and others."

Here he became faint, and said no more; but he pointed to a casket, which was brought him, and he made a sign that I should open it. It contained, besides his mother's diamonds, all the papers concerning the treasure. Then the doctors, whom he had sent away during our talk, came back, and pressing my hand feebly, he implored me not to leave him while the breath was in his body. I stayed, therefore, in his chamber, repeating the prayers proper for his condition, but all the time I felt that I was losing precious moments that might have enabled me to over-

take Patrick before his embarkation at Waterford.

I would bring him back, I thought, for he was little in danger in Ireland of an arrest for a duel. I had taken the precaution to have relays of horses ready for me on the road to Waterford, and the moment Lord Lynch died I was in the saddle, riding as fast as if I had wings. Alas! when I reached the port I found that Patrick and his party had sailed that very morning. I found only my brother's valet, who was seeking means to get back to his mistress, with a message that the circumstances that necessitated his lordship's departure for France had given him no time to write to her or me. He begged me to take all possible care of his wife, and begged her not to grieve too much at his departure.

This amount of thoughtfulness on his part somewhat consoled me. I hesitated as to which of those belonging to me most needed my care. Rose had her brother George for her protector; Patrick I might probably not be able to find. I returned therefore to Sara. I expected to be the first to tell her of her husband's duel, and his flight to France; but she had heard it from a servant she had sent to follow me. Happily she knew nothing of *Mademoiselle de L—*, of her being in Ireland, or of her connection with the duel.

I found Sara bent on going over to France and rejoining her husband. She implored me to accompany her, and I saw no better way of bringing Patrick back to virtue and to duty than by presenting him so tender and devoted a spouse. Her preparations did not take long, but I noticed that she thought little of her own wants in comparison with those of her husband. Almost everything she took with her was to contribute to his comfort.

Whilst she was engaged in this I paid a visit to my beloved parishioners. I was received with transports of joy by my flock. How I wished it had been possible for me never again to leave them!

My sister-in-law left all her affairs in

Dilnich's hands. We found a vessel ready to sail for Dunkirk. We had a good passage and reached Paris very comfortably.

As I drew near the great city, however, I began to feel uneasy, and decided to stop at St. Denis, while I sent a servant into Paris to get news of my brothers and sister. I gave him orders to go first to Count S—, and to tell him I had arrived, without mentioning my lady. Then he was to go to Les Saisons, for I presumed Lord Tenermill and Rose to be there. I told him that he need hold no communication with my brother Patrick, but to see Lord Tenermill in private, and beg him to come to me at St. Denis.

I was sitting by a window thinking over my perplexities, and my sister-in-law was apparently doing the same in another part of the room, when I heard a carriage drive up, from which, to my great surprise, I saw my two brothers and Count S— descend, and then, to my still greater amazement, handed out two ladies, Mademoiselle de L— and my sister Rose!

It was by the especial mercy of Heaven that I did not at this sight utter a cry. I was furious at the stupidity of the servant, who had brought these unwelcome visitors upon us all at once. Happily, my sister-in-law did not seem to have heard the carriage. I drew a book from my pocket, and asked her to read a few pages which I pointed out, and give me her opinion of them. I then went down-stairs, ordering one of the servants to stand upon the landing, and not to let any one pass him until I returned. Then I ran down as fast as I was able, and found all the party just entering the hall door.

After a few eager fraternal embraces, I had them shown into a room on the ground floor. Patrick looked embarrassed, Mademoiselle de L— serene. Rose and Tenermill satisfied and happy. What could it all mean, I thought.

Tenermill spoke first. He said that they were delighted to see me; that they wanted nothing but my presence

to complete their happiness,—“even Patrick's,” he added, looking at his brother, who cast his eyes down. “However,” he continued, “I may as well tell you all at once. Rose has obtained everything her heart could wish. The matter of Des Pesses' legacy is settled. The count has won his lawsuit, and they need only wait a short while longer before the wedding day. King James has taken me into favor. He has procured for me the command of an Irish regiment which is to embark for Ireland at the breaking out of the war. He has also promised to give me twelve thousand francs out of his private purse, and he has extended his favor so far as to take great interest in Patrick's affairs. Patrick came over here, as you know, very unhappy. He had been forced into a most miserable marriage with an odious woman; he was forced to fly from Ireland by the fatal result of a duel, and he has no inclination to return there. I say nothing of his attachment to Mademoiselle de L—, who merits all his devotion. These things I reported to our good sovereign. He thinks that, under all these circumstances, especially considering that the marriage was only a marriage so far as regards the marriage ceremony, husband and wife having never lived in conjugal relations,—seeing also that the wife he has in Ireland is the daughter of Fincer, a man whom he naturally holds in abhorrence—his Majesty is of opinion that the marriage ought to be dissolved, and yesterday he laid the whole matter before some of the best lawyers in Paris. Their opinion was favorable. The case is now under consideration by two English bishops, after which all we shall have to do is to carry it into a court of law. We are very glad you are here; you can give important testimony; and although the marriage of Patrick was entirely your own doing, you cannot but feel by this time that it was not an act approved by Heaven.”

His words aroused my anger. Thank Heaven I did not answer him as I might have done. I began by expressing my satisfaction at the good fortune

that had befallen himself and Rose, and then I asked him how he could dare to speak of a lady lovely and virtuous like Patrick's wife as an odious woman.

Patrick replied with an apology for his brother. He had never spoken of her, or thought of her as an "odious woman," but I well knew that his marriage had brought him nothing but unhappiness, and that the bond was nothing but a legal tie, which law courts could dissolve.

I turned to Mademoiselle de L—. "I have given you credit," I said, "in all our intercourse for good sense and good feeling, am I to change my opinion of you, to-day?"

Then Tenermill, as usual, made light of what he called my "too delicate scruples," and then, turning to Mademoiselle de L—, said, "Trust to me, and feel easy. I promise you that two days hence our good brother will see things just as we do, and doubtless will beseech you to let his be the hand that bestows on you the nuptial benediction."

With that he made a sign to the two ladies to leave the room. "Stop!" I cried, before they did so, "and tell me," I added, turning to Tenermill, "what charges you can bring that might secure a decision against a woman as amiable, as affectionate, as virtuous as your sister-in-law? She has even quitted her own country for Patrick's sake. She is at this very moment in this house. She has come here to follow his fortunes, or to stand by his side in danger. If you bring this matter to trial she shall not be undefended. She is rich enough to pay lawyers. She is a woman of energy and spirit, and I will stand by her to the last moment, pitying her misfortunes, and admiring her virtue."

Great was their astonishment as I made this speech. My two brothers and Count S— drew apart and spoke in whispers, whilst I profited by the opportunity to reproach Mademoiselle de L— for the trouble she was bringing into our family.

"Can you do this," I said, "you

whose virtue and good sense have hitherto inspired me with such high esteem? What can you hope for? Do you not see that in ruining our family you will infallibly sacrifice your own reputation? For if my brothers bring this matter into the law courts, I will defend my sister-in-law's rights until I die. I will influence the judges. I will open their eyes. All France shall know what to think of you."

She burst into tears, and answered that she had no wish to trouble the repose of our family. That she had never had any hope that the marriage could be dissolved until Lord Tenermill had assured her of the favor of the king, and the opinion of the lawyers.

Here Rose broke in, and confirmed her words, adding many things in her justification. But the moment I perceived that Rose was on her side I sighed bitterly, and felt that there was no one left in whom I could place confidence.

My two brothers at last came back to me, and Patrick, who was the spokesman, thanked me for not having told my sister-in-law that they were in the house, for that under present circumstances he could not see her. "We will leave you now," he said. "We can meet in Paris. I am staying with Count S—, where at any hour you can find me. Make all arrangements you think proper for my wife. Do everything you can to make her comfortable."

Though much in this speech roused my indignation, I endeavored to restrain my feelings. It seemed to me there was more to be feared than hoped from an interview between Patrick and his wife at that moment, and I reflected, too, that if I was to bring Patrick back by my exhortations to his duty, what I said would have more effect in private than in the presence of so large a company. However, I offered two objections. One was that through the servants my lady would be almost sure to hear that their master had been at the house and had not seen her; "and in the second place," I said, "how will



it look if she is lodged in a strange house in Paris, where she cannot fail to know that Rose and Tenermill have set up an establishment."

I had tears in my eyes and bitterness in my heart as I spoke thus to them. Before they could answer a commotion in the rooms above startled us, and one of my sister-in-law's servants, abruptly interrupting us, asked me to come to her.

I hastened to obey. This man, who was much in the confidence of his mistress, the same whom she had sent to follow me when I went to the house of Anglesey, had found his way to her, notwithstanding the precautions I had taken, and had told her, not only that his master and several of his family were in the house, but also what he had heard from Count S——'s servants, that there was a project of divorce on foot, against which he warned her.

I found her in a terrible state of agitation—of anger and of jealousy. At first she was disposed to accuse me of having had a share in the treachery. I could only pacify her by promising that in twenty-four hours without fail I would bring her husband back to her. "Trust me," I cried, "trust my honor and my zeal. Nothing can be done against you in one day. I have plans that I had rather not explain to you. If the hope I have that my brother may listen to my advice should fail, I give you my word that the measures I shall adopt as a last resort will succeed infallibly."

But my present difficulty was where to find lodgings. At that moment my old servant Joe presented himself. He explained the unexpected arrival of so large and unwelcome a company by telling me that my man had given my message to Count S—— and had then set off to Les Saisons, where I had told him he would probably find Lord Tenermill. Meantime, Count S—— had hurried to give the good news to my brothers and Rose, who were in Paris, and taking the whole party in his coach, had come to greet me. They had all arrived at St. Denis greatly delighted at the thought that I was there. Joe

added that they had left as soon as I was called away to her ladyship, but that they had not gone far before Miss Rose had sent him back to tell me that I had better take my sister-in-law to Les Saisons.

This at least relieved my mind from a present anxiety. I sent Joe to our country house at once to get things ready for our arrival, and I went back to my sister-in-law, whose anger had given place to despair.

"I know too well," I said, "what reasons you have for complaint; but do not make things worse by indulging unfounded suspicions. You are expected at Les Saisons. Rose can hardly have sent you a message to that effect without the consent and approval of your husband."

This seemed somewhat to comfort her; and during our little journey I talked to her in a way that I hoped might give her courage and tranquillity. But alas! we had no sooner arrived at our country place than she became so ill that her women put her to bed, and I sent in all haste for a doctor. As I sat beside her, she opened her heart to me as she had never done before. I was more indignant at her husband's conduct than she was. I was almost ready to start at once for Saint Germain, to throw myself at the king's feet and implore him to lend no countenance to a divorce, which seemed to me the utmost stretch of cruelty.

Just then I heard a carriage entering the courtyard. I supposed that it was that of the doctor whom I had sent for. What, therefore, was my astonishment when I went down to receive him, to find myself met by Mademoiselle de L—— and Rose!

"What brings you here?" I cried. Then turning abruptly to Mademoiselle de L—— I exclaimed, "How dare you enter a house that owes suffering and sorrow to you?" My sister stopped me, saying in Irish that they came on a mission of peace and reconciliation, and that I should be sorry for my harshness to her companion when I knew what she had come to say.

She then turned into a small room,



where Mademoiselle de L— sank into a chair, while Rose explained a plan that had been formed among them. Mademoiselle de L— renounced all pretensions to the hand of Patrick, but they would all form one family. As soon as Rose was married Mademoiselle de L— should live with her, and be to her like a sister. “To this arrangement,” she said, “Mademoiselle de L— consents. She shows noble generosity in thus sacrificing her dearest hopes to the peace and honor of our family. But I dare hardly answer for Patrick. He thinks he has cause of just complaint against his wife. I can hardly hope he will pardon her what passed between him and Dilnich, which was all her doing.”

I knew that I could set that matter right by telling what I knew from my brother’s valet, and from Dilnich, but I was not prepared to assent to this plan of family union, remembering too well the words once spoken by George. Before I had time, however, to say anything to Rose, they came and told me that the doctor had arrived, and I went to hear his opinion. It was very unfavorable. He said that her ladyship had received some violent mental shock, and that unless some remedy could be found for that, his art would be unavailing.

Rose had accompanied me to the sick-room, but I refused to let Mademoiselle de L— come with her. The doctor’s report was so alarming that I thought it my duty to send off an express for Patrick. I begged Rose to leave her sister-in-law to her women, as her cares and caresses seemed only to irritate her, and I was sending off the messenger to Paris when I heard a sharp cry. Running into the room where we had left Mademoiselle de L—, I found her lying unconscious on the floor, with Rose bending over her. Happily, the doctor was at hand. We sent for him, but it was long before he brought her to herself, and then he told me in a whisper, that there was more immediate danger in her case than in that of the lady who was lying ill up-stairs.

Under these circumstances what could I do but offer her hospitality at Les Saisons? —and she was carried to a room as far off as possible from that in which lay my unfortunate sister-in-law.

This arrangement having been made, I had a few words with Rose, who blamed me for what she called my prejudice against Mademoiselle de L—. “It is true,” she said, “that she and Patrick are ardently attached to one another, and it was a cruel dispensation of Providence that separated their fates, but if you knew Mademoiselle de L— as I do, and if you had more confidence in Patrick, you would trust their perfect innocence and sincerity. They were thunderstruck when they learned of poor Sara’s arrival in France, and though they had begun to form new hopes, her coming has put an end to them. Mademoiselle de L— has perceived that the publicity likely to be given the affair might injure her reputation and her honor. She has told Patrick that she can never marry him. He received this announcement like a sentence of death. Then George interposed, and approved the plan which we have come here to propose to my sister-in-law.”

Rose had hardly recovered from her astonishment at the indignation with which I at once rejected this plan, when a servant announced the arrival of George and Patrick. Before I could speak they overwhelmed me with questions. Had I seen Rose? What did my sister-in-law say? How had she received Mademoiselle de L—?

“Thank Heaven you have come,” I said to Patrick. “Your wife is so ill that the doctor fears for her life. Come with me and see what you can do for her. Listen for a moment to the voice of duty and compassion.” George interrupted me: “He is quite ready to see his wife,” he said. “You ought to give him credit for his good intentions.” “Ah! all advice from you is suspicious,” I cried. George laughed, as if he felt himself superior to my reproaches.

Meantime we had gone up to my

sister-in-law's chamber. Patrick entered with a brisk step, and kissed her with many kind expressions of regard and of politeness. His words and his presence seemed like water on a thirsty ground. I seized the opportunity to give some little explanations, and called upon Patrick to confess that he would never have thought of taking steps to divorce his wife, had it not been for what had passed with Dilnich, and on Sara to say that she had never instigated her uncle's violence, and that, save what concerned that matter, her husband had always treated her with tenderness and consideration. "Your unhappiness, my dear sister," I said, "comes from unfounded suspicions, which can be destroyed in a moment. My brother is here to promise you all the fidelity and the tenderness due to you as his wife, and I am sure you will not suspect him of bad faith in thus returning to you freely and voluntarily."

Patrick sealed this promise with a kiss, and Sara appeared fully satisfied. Alas! I should have felt more confidence in Patrick had I not known that it would be impossible to keep from him the knowledge that *Mademoiselle de L—* was in the house, and that her life, too, was in danger. Under these circumstances, I thought it best to tell him this at once, and to take him myself to her room, where I might hope that my exhortations to duty might enable them both to achieve a victory over their unhappy inclinations.

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From Macmillan's Magazine.

THE PARLIAMENTS AND MINISTRIES OF  
THE CENTURY.

THE British Constitution is the grandest example of the type which is not made but grows. It knows not the day of its nativity; it came not forth into the world full-blown from some ingenious and constructive brain; its natural elasticity has never been confined within the range of any document. It is an accretion of

accumulated custom and tradition, "broadening down from precedent to precedent," and undergoing changes which are not the less sure because they make no stir. It is, in a word, what jurists have agreed to call a flexible and not a rigid constitution. It is then only natural to suppose that within the present century time's "thievish progress" has left its mark upon it. The great central institutions stand apparently unmoved, but the stream of time runs on, and slowly but surely tells upon the fabric. It looks outwardly the same, but the careful eye can detect the changes which do not lie upon the surface. The present Parliament is the twenty-fifth of the United Kingdom of Great Britain and Ireland. We have therefore had an experience of nearly a century of such Parliaments, and it may be interesting to take a rapid glance backwards, and see what can be gleaned from such a survey of the now closing century of our Parliamentary history.

Something in the first place must be said of the relative durations of Parliaments and ministries. It will have been observed that the twenty-five Parliaments of the century have had an average life of about four years apiece. But their respective fates have been curiously divergent. A few have lived to a green old age, while of others the thin-spun thread has been early cut. Three only have lasted over six years, and only seven over five; so that the proportion of long-lived Parliaments is comparatively small. In three cases life has failed to reach a single year. Having regard to the average it may be said that the Septennial Act has proved of much less importance than might have been predicted. For many years, indeed, during the reign of George the Third it was a common thing for Parliaments to die a natural death, but things are now so altered, that the advocates of triennial Parliaments would gain little satisfaction by the change. Contemporaneously with these twenty-five Parliaments there have been up to the time of Mr. Gladstone's retirement a succession of

twenty-nine ministries; but after making due allowance for reconstructions, and for the fact that prior to the Reform Act of 1867 a dissolution followed upon the demise of the crown, it will be seen that the number of ministries and Parliaments has been about the same, and it may be said generally that each Parliament has had its separate ministry. The one great exception was that of the Earl of Liverpool who took the reins of government in 1812, and continued to hold them for a space of fourteen years, during which period no less than four Parliaments were elected. It was a singular exception which was due to the peculiar conditions of the time, and it is not likely to recur again. The relation of ministries and Parliaments, and the intimate dependence of the former upon the latter could not be better illustrated than by a careful observation of their contemporaneous histories. An old ministry will sometimes meet a new Parliament, and a new Parliament will sometimes grudgingly support an old ministry, but as a general rule they may be said to rise and fall together. Each Parliament is too jealous to tolerate any creation but its own.

A brief and rapid sketch of the Parliaments and ministries, sufficient to bring into relief their salient characteristics, will enable us to trace the changes which have crept into the spirit and the working of our Parliamentary institutions.

The first Parliament of the United Kingdom, which was merely the continued existence of one elected in 1796, met in January, 1801, and was dissolved in the autumn of the following year. Pitt was at this time the one indispensable man who alike possessed the king's confidence and the capacity to govern. Addington tried to do it for a while, but Pitt alone was equal to the times, and he was premier when he sank beneath the cares of office in 1806. This was a year which was marked by events of great constitutional importance. It was then, for the first time since the rise of Pitt in 1783, and for the last time until 1830,

that the Whigs held office. As Byron wittily put it,—

Nought's permanent among the human  
race,  
Except the Whigs not getting into place.

Those who are accustomed to the present uniform swing of the pendulum from one side to the other, may well reflect with amazement upon a time when one of the great parties in the State, with one brief exception, was excluded from office for nearly half a century. It is a fact which is eloquent with a meaning. This Whig ministry, the "Ministry of all the Talents," with Lord Grenville as premier and Fox as foreign secretary, had a very brief existence. They proposed a measure of Catholic relief. The king not only forbade them to introduce the bill, or even to offer him any advice upon the subject, but also endeavored to extort from them a pledge that they would never presume to do so again. They refused, were dismissed, and a Tory ministry with the Duke of Portland at its head was appointed in their place. It was in this government, it may be noted, that Lord Palmerston, then a young man of twenty-three, held his first office as a lord of the Admiralty. This ministry immediately advised a dissolution, and taking advantage of the favoring breezes of the hour, they succeeded in obtaining a substantial majority. Then ensued in home politics a long period of monotonous routine. If the administration was safe, it certainly was dull. It was an age of respectable mediocrities. Burke's stately eloquence, Fox's generous ardor, and Pitt's administrative genius, were a memory to treasure, and that was all. When the mantles fell there were none to take them up. The Duke of Portland died in 1809, and was succeeded by Spencer Perceval, a conscientious minister, whose useful services did not screen him from the gibes of the malicious and the witty. It was recorded to his credit that he was "faithful to Mrs. Perceval and kind to the Master Percevals;" but it was somewhat cruelly added that "if pub-

lic and private virtues must always be incompatible," it were better that "he destroyed the domestic happiness of Wood or Cockell, owed for the zeal of the preceding year, whipped his boys, and saved his country." Perceval was assassinated in the lobby of the House in 1812, and for nearly fifteen years the country submitted to the soporific rule of the "arch-mediocrity," the industrious Earl of Liverpool. He retired from ill health in 1827, and was succeeded by the brilliant and meteoric Canning, who at least for his contributions to "The Anti-Jacobin" will always find a grateful posterity. A few months of office killed him, and Lord Goderich, whom Disraeli dubbed the "transient and embarrassed phantom," took for a time the vacant place. He made way for the Duke of Wellington in 1828, and for the first and last time a great soldier became prime minister of England. For nearly three years he saw to it that the king's government should be carried on, and his administration was marked by an event of great constitutional importance, the passing of the Act for Catholic Emancipation. It was an event of great moment in itself, for it closed a conflict which had lasted for nearly a generation. But the overwhelming interest excited by the passing of the act has thrown into the shade an aspect of the case which is equally important. George the Fourth yielded where George the Third had stood firm, and in surrendering the position, he marked, as will be seen, the final consummation of a change in our constitutional practice which had long been impending.

The long period of repression and reaction which had followed the excesses of the French Revolution, and which had thrown Liberalism backwards for nearly half a century, was now drawing to a close. The spirit of innovation was everywhere abroad, and the Don Quixotes of Conservatism began to labor heavily beneath the cumbersome armor of a bygone age. The new Parliament of 1830 contained a majority favorable to reform. The Duke of Wellington resigned, and Earl

Grey formed a Whig administration. The events which followed are too well known to need to be repeated here. For our present purpose it is enough to note that Earl Grey successfully appealed to the country in 1831, and after a great historic conflict with the Lords passed the first Reform Bill into law. Earl Grey retired in 1834, and Lord Melbourne took his place. This amiable and easy peer, the "indolent Epicurean," who was content "to saunter over the destinies of a nation and lounge away the glory of an empire," had not held office many months when William the Fourth used his prerogative in a way of which something will presently be said. He believed, or affected to believe, that the Commons did not truly represent the opinion of the country. He dismissed the Whig ministry, and sent for Sir Robert Peel, who advised a dissolution. But the king was wrong, and Peel, rather than meet a hostile majority in the House of Commons, resigned. Lord Melbourne returned to power, and formed one of the longest administrations of the century. His authority in 1839 began to ooze away, and his government suffered a virtual defeat on a measure which involved the suspension of the constitution of Jamaica. He resigned; Sir Robert Peel was sent for, and his attempt to form a government gave rise to one of those events which, though trivial in themselves, produce more important consequences. On this occasion it was a question of the removal of the ladies of the bedchamber, which, though a purely personal question, constrained Sir Robert to give up his undertaking, and prolonged the Whig ministry until 1841. In that year occurred an incident which has since been turned into a very formidable precedent. A motion of want of confidence was the first time in the history of the House of Commons successfully carried against the ministry of the day by a majority of one. This historic resolution, which was moved by Peel himself, deserves particular record. It ran as follows: "That her Majesty's government do not suffi-

ciently possess the confidence of the House of Commons to enable them to carry through the House measures which they deem essential to the public welfare, and that their continuance in office under such circumstances is at variance with the spirit of the Constitution." It was a strongly worded claim by the Commons for a paramount position which is now without question accorded to them. The Melbourne ministry met the new Parliament in 1841, and, being defeated on an amendment to the address, immediately resigned. Sir Robert Peel succeeded in forming a durable administration which lasted to the summer of 1846, when a parallel event to that which happened in 1886 occurred. Just as Mr. Gladstone split up the Liberal party on the question of Home Rule, so did Sir Robert Peel split up the Conservatives on the repeal of the Corn Laws. The Irish famine gave his mind the final bias in the direction to which it had previously been tending; as the Duke of Wellington remarked with characteristic frankness, "Rotten potatoes have done it all; they put him in his d—d fright." It is not surprising that Peel's discontented followers looked out for an occasion of revenge, and they found it in the Coercion Bill for Ireland. The Peel ministry were defeated by a majority of seventy-three votes. It was a rancorous outburst of party spirit which set an evil precedent for the future conduct of parliamentary government.

Lord John Russell now succeeded to the place to which his eminent merits had entitled him. His diminutive stature caused people to wonder how one so great could yet be so little, while his self-confidence was such that men jestingly declared that he was ready to do anything at a moment's notice, from performing an operation to taking command of the Channel Fleet. His administration lasted until 1852, and was marked by an incident unique in the parliamentary history of the century; the dismissal of Lord Palmerston from the Foreign Office for his persistent refusal to submit his despatches to his

colleagues and the crown. It was an event which emphasized the right of the premier and the crown to be consulted by ministers on all important matters which come within the sphere of their official duties, and established once for all the practice to be followed in the future. However, in 1852 Lord Palmerston had, as he said, his "tit-for-tat" with Lord John Russell. Upon the *coup d'état* in France a Militia Bill was introduced, and the government was defeated on an amendment proposed by Lord Palmerston himself. They immediately resigned. The Earl of Derby, whose dashing oratory has earned for him the title of the "Rupert of debate," formed a government of mostly untried men, which was styled by the facetious the "Who, Who, Government." To its inglorious existence Disraeli's first adventures in the region of finance speedily proved fatal. As Lord Derby wittily said, Benjamin's mess was greater than all the rest. The general election which followed gave the ministry so small a majority that they resigned. Parties were now in a state of unequal equilibrium, and neither Conservatives nor Whigs could form a strong administration. Then ensued the uncommon spectacle of a coalition ministry. The Peelites under the leadership of the Earl of Aberdeen formed a government by calling in the assistance of the Whigs. Disraeli declared that the English people detested coalitions. They had an evil reputation from the fact that George the Third loved to make use of them in order to set one party against the other. And to this one in particular the country had no reason to be grateful, for it proved responsible for the war in the Crimea. In 1855 the coalition ministry fell discredited, on Mr. Roebuck's motion for a committee of inquiry into the conduct of the war, by an adverse majority of one hundred and fifty-seven votes. Consisting as it did of a group of men who were rivals in ability but who disagreed in principle, it contained in itself the seeds of discord, and permitted things to drift. Lord Palmerston suc-



ceeded, and held office until 1857, when he was defeated on Mr. Cobden's motion condemning his policy in China. But Lord Palmerston was a man of daring and resource; he knew his countrymen, and to their judgment he appealed. To the amazement of the world he succeeded in reversing the verdict of the Commons, and was rewarded by obtaining a substantial majority. The Manchester school of politicians, who were the proximate cause of the election, were smitten hip and thigh, and Bright and Cobden with the rest were ejected from their seats. It was an almost unexampled triumph for a minister; but it was short-lived. Once again, in 1858 as in 1852, Louis Napoleon proved fatal to an English administration. The Orsini bombs had an explosive force in more senses than one, and reverberated far beyond the narrow circle of the Tuileries. They were the immediate cause of the introduction of Lord Palmerston's Conspiracy Bill, and in the course of the debate an amendment was moved by Mr. Milner Gibson, involving a censure on the government for its failure to reply to a French despatch which had been laid before Parliament. The amendment was carried by nineteen votes and Lord Palmerston resigned. The significance of the affair lies in the fact that it was an interference by the Commons in an act which belonged purely to the executive, and it is not without its meaning. The Earl of Derby once more formed a brief administration, with Disraeli as chancellor of the exchequer and leader of the House. On an attempted measure of reform he was defeated on Lord John Russell's resolution by thirty-nine votes. An unsuccessful appeal to the country followed, and when Lord Hartington's amendment to the address was carried by thirteen, the Derby ministry resigned. Lord Palmerston again formed a strong administration which, by a curious sport of fortune, exactly coincided in duration with Lord Melbourne's second government, namely, six years and one hundred and forty-one days. Shortly after the dissolution

Lord Palmerston died in 1865, and Lord John Russell, who was raised to the peerage as Earl Russell, assumed the reins of power. His former resistance to any extension of the Reform Act of 1832 had earned for him the nickname of "Finality Jack," but this did not prevent him from taking up the subject once again. Reform, however, was a thing which apparently neither side could handle with success. It proved fatal to Lord Russell as it had done to his predecessor, and brought his government to an end within a year. It was a session rendered memorable by the formation of the party of the Cave of Adullam, and by the brilliant rhetoric of Robert Lowe, who electrified the House, and was wittily nicknamed by Disraeli the "Whitehead torpedo." The Earl of Derby now formed his third administration, and boldly grappling with reform, he took, to use a now celebrated phrase, his "leap in the dark." In 1868 his health compelled him to retire, and the opportunity came to Benjamin Disraeli. The "superlative Hebrew conjuror" of Carlyle became prime minister of England; and he who was at first laughed down with derision, commanded the respect and obedience of the House. To use his own expression, which is more forcible than elegant, he had climbed to the top of the greasy pole. It proved more slippery than probably even he imagined, and in a very few months he came down with a run, when Mr. Gladstone's resolution on the Irish Church placed him in a minority. Disraeli advised a dissolution, but he declined to meet a new House containing a majority against him. Mr. Gladstone thereupon formed his first administration, which endured for rather over five years and was marked by much legislative spirit. But in 1873 he was placed in a minority on an Irish University Bill. Disraeli was sent for by the queen, but he prudently declined to form a new administration without a new Parliament. The end was not long delayed, for in February, 1874, Mr. Gladstone gave himself the *coup de grâce* by suddenly determining



to advise a dissolution. The result showed a great Conservative reaction which once more brought Disraeli to the front. The events which followed will be within common memory. It must be enough to note the fact that the period which has elapsed since then has been marked by three long administrations, namely those of Lord Beaconsfield, Mr. Gladstone, and the Marquis of Salisbury; and that the year 1885 was marked by a Reform Act which gave rise to a sharp and short conflict with the Lords. But until the date of the introduction of the Home Rule Bill, no other matter of constitutional importance arose.

Such in the broadest possible outline is the history of the ministries and Parliaments of the century; a map, so to speak, disclosing the main features but ignoring the details of the region which we have rapidly traversed. What, then, are the most striking characteristics of the scene? One of its most impressive features certainly is the change which has occurred in the position occupied by the House of Commons in relation to ministers and the crown. It stands out predominantly like some mountain range which towers above the plain. Here, as almost everywhere throughout the Western world, the people's House has arrogated to itself the first place in the State; a fact which marks a step in the forward march of democracy, and is an unmistakable sign of what, in the absence of a better term, can only be called the spirit of the age. Popular Chambers have everywhere encroached upon rights and privileges which did not formerly belong to them. Sometimes victory has only been wrested with a struggle, but sometimes all has gradually and quietly been conceded. In England the process has a history of its own, and the history of the various ways in which it has manifested itself is the matter which now immediately concerns us.

And first as to the relation of the Commons to the ministers and the crown. The House had formerly no practical influence over either of the

latter, or at least none legally recognized by the customs and the conventions of the Constitution. The crown summoned and dissolved the House as it pleased, and ministers had not much regard for its judgment or its votes. If the Commons wished to have their way, their only resource was to present addresses to the crown or cut off the supplies. They might worry the ministers or the crown into concessions. But that state of things has long passed away, and from being a mere auxiliary organ of government the lower House has won its way into an absolute pre-eminence. It has become, to make another use of Lord Rosebery's expression, the "predominant partner" in Parliament. It is upon the House of Commons that every eye is turned; it is there that the centre of political gravity has shifted. There have been no revolutions, no bombastic declamations or watering trees of liberty with blood; but it is an accomplished fact notwithstanding. It now remains to be seen how this has come about, and to note the several steps in the transformation as they have occurred within the present century.

At the outset a distinction must be drawn between an administration or a government in general and those leading members of it who are said to form the Cabinet, for it is the relations of the crown, the Cabinet, and the Commons which will now have to be considered. It is in accordance with the illogical character of British institutions that the Cabinet is utterly unknown to the law. Both Pepys and Clarendon use the word, and according to the latter it was first applied, as a term of reproach among the courtiers, to the king's Committee of State in 1640. In like manner too the terms prime minister and premier are not recognized by law. Swift speaks somewhere of the "premier ministers of state," as though in his day the office was beginning to be evolved. The crown itself first presided in the councils of the Cabinet, and no minister presumed to occupy the place. Walpole indeed was gravely accused of

making for himself the place of a first minister, a charge against which he indignantly protested. But he was premier in fact, if he was not so in name, as no one knew better than himself. As he said, when Townshend was admitted to the Cabinet, "the firm must be Walpole and Townshend, not Townshend and Walpole." During the reigns of the first two Georges, who knew little English and lived mostly at the Hanoverian court, a free hand was tacitly accorded to English Cabinets in the administration of affairs. But with the accession of George the Third came a very different state of things. That his ministers were his servants who might be appointed and dismissed solely at his own good-will and pleasure, was not merely the preconceived opinion of the new king, but was apparently the generally received doctrine of the day, in which some statesmen themselves were willing to acquiesce. Lord Shelburne, for instance, indignantly declared that "he would never consent that the king of England should be a king of the Mahrattas," who was, he declared, "in fact nothing more than a royal pageant." The Commons sometimes turned restive, as when in 1780 they affirmed Mr. Dunning's resolution "that the influence of the crown has increased, is increasing, and ought to be diminished." But feeble protests were of little avail, and when the first Parliament of the United Kingdom met in 1801, the old doctrine of kingship and prerogative was held in all its fullness. The magnitude of the change which has since occurred in our constitutional practice may best be realized by saying that as regards the relation of the crown to the Cabinet and Commons, that practice has been totally inverted; and the process was accomplished within the first half of the century. At its beginning the crown appointed and dismissed its ministers without even deigning to consult the wishes of the Commons; that was a privilege of the monarch with which they were deemed to have no right of interference. Now, though the crown selects its own prime minister, he is to

all intents and purposes appointed by the Commons. The party which possesses a majority in the House, in reality indicates the man who must be chosen. On the other hand the crown would not now dismiss a Cabinet which possessed the confidence of the Commons, but would wait until that confidence was unmistakably withdrawn before venturing on such a use of the prerogative. There is here one of those constitutional conventions which, as Professor Dicey says, are "precepts for determining the mode and spirit in which the prerogative is to be exercised;" while the prerogative is "nothing else than the residue of discretionary or arbitrary authority which at any given time is legally left in the hands of the crown." Perhaps the most important function of the Cabinet is to form, as it were, a connecting link between the crown and Parliament. Mr. Gladstone has happily described it as "a clearing-house of political forces," where everything is balanced and adjusted, and the nett result obtained. But of those forces that exercised by the Commons is unquestionably the strongest, and inevitably has a preponderating share in directing the general movement of affairs.

On five occasions within the present century — in 1806, 1818, 1829, 1834, and 1839 — a crisis has occurred in the use of the prerogative, and they are excellent illustrations of the remarkable changes which have gradually transformed our constitutional conventions. In 1806 the Grenville ministry proposed to introduce a bill for Catholic emancipation, an act of policy which drew from Sheridan the remark that he had often heard of people running their heads against a wall, but had never heard before of them building a wall to knock their heads against. What followed has already been narrated, and forms a striking illustration of the way in which the personal dislikes of the crown to a particular form of policy were allowed to defeat the other forces in the State. A ministry was dismissed and another was appointed with as little regard to the opinions of the Commons

as though they existed in another planet. The king's word was enough, and there was no more to be said; and that was passed without protest which in these days would raise a storm of indignation. Again, in 1818 the prince regent performed an act of a very arbitrary kind. The demise of the king was hourly expected, and in order to avoid meeting the existing House, which he would have to summon upon his father's death, and to which it would seem that he had taken a dislike, he went down to Westminster and dissolved Parliament without the slightest notice. Events move on and the scene changes. George the Fourth is king; and in 1829 the government of the Duke of Wellington is forced to the conclusion that they can no longer avert the necessity for some measure of Catholic relief. The king refuses to assent to the bill and the ministry resigns; he withdraws his refusal and the bill becomes law. It is perhaps not too much to say that, next to the Reform Act of 1832, this act of the king is the most important political event in the English history of this century. It was a surrender of the citadel; it denoted, as Mr. Gladstone has said, "the death of British kingship in its older sense." Like Cleisthenes at Athens, George the Fourth admitted the people into partnership. From that day to this the crown has not ventured to veto legislation on the ground merely of personal dislike. Its moral influence over ministers may be great, but that is almost the limit of its powers. The scene shifts again, and William the Fourth is on the throne. He was a conscientious monarch who probably desired to use his prerogative in strict accordance with the constitutional conventions of the day. But the old kingly spirit still lingered in his mind, and his dislike of the Whigs betrayed him into a serious misuse of his prerogative. The dislike of his father and his brother for the Whigs was unabashed and open, and they almost continuously shut them out of office in a way which is but another illustration of the old absolutist theory. The Whigs were too exclusive to be

popular; they were a sort of coterie with its seat at Holland House, not admitting even Burke to their councils in the degree to which he was entitled. But they nobly sacrificed their interests to their principles, and ran counter to the wishes of the crown. William the Fourth shared the prejudice against them, and in 1834 he found a pretext to dismiss the Melbourne ministry. Lord Althorp had succeeded his father as Earl Spencer, and the king, declaring his conviction that without him in the Commons the government could not be carried on, suddenly dismissed his ministers. It was a perfectly legitimate use of the prerogative, but it was nevertheless a serious mistake. The House of Commons had its revenge. Upon the dissolution the Melbourne ministry had to be recalled to power, and from that time down to the Conservative Reform Act of 1867 the Whigs enjoyed the largest share of office. For the last time in 1839 ministers were kept out of office on the ground of personal disagreement with the crown. At that time Sir Robert Peel, who had been asked to form a Cabinet, demanded that the ladies of the bedchamber should be changed with the old administration. Her Majesty refused, and the Melbourne ministry dragged on a discredited existence until 1841. It was the last episode in a contest which is now probably forever closed.

As the crown has lost authority, so in proportion has the House of Commons gained it, and this in other ways than those already named. There is, for instance, nothing but the imperative demands of constitutional custom which compels a member of the Cabinet to sit in either House of Parliament; but that custom has almost the force of law; so that in the case of a minister who is not a peer, he is practically bound to find a seat in the House of Commons. Mr. Gladstone held office from December, 1845, to July, 1846, without a seat in the House of Commons, and that is the most notable exception to the rule within the present century, and was the fruit of

very special circumstances. So, too, a member of the Cabinet must always hold some office, and when Lord John Russell for a brief period once led the House of Commons without holding office, such an irregular arrangement was violently condemned. For it is by such constitutional practices as these that the House of Commons is able to retain its control over the government. And so too with that paradox of the British Constitution by which the Cabinet, or the central executive body, has become almost the sole source of legislation. It is but a mark of the intimate connection which binds together Parliaments and ministries. As in nature animals take color from the objects which surround them, so have ministries taken color, so to speak, from Parliament and assumed the livery of a legislative body. Nor is this all, for the House of Commons has invaded the sphere of the executive, as it did when in 1857 and 1859 on the respective motions of Mr. Cobden and Mr. Milner Gibson it upset ministries on purely administrative measures.

Of the relation of the House of Commons to the Lords it can only be said that there has been very little change. From the way in which the House of Lords is now occasionally spoken of, it might be inferred that that House had been in constant conflict with the Commons. Yet in fact nothing can be further from the truth, for probably a less obstructive second Chamber the world has never seen. It has been infinitely less so than the American Senate or some of our Colonial Legislative Councils. Once only, over the great Reform Act, has there been anything like a serious conflict. The Lords have helped to pass into law all those great legislative measures which, as making for liberty and the emancipation of mankind, will always be regarded as the glory of the age. It is significant that of the premiers of the century all but eight (and one of these was an Irish peer) have been members of the House of Lords, and, if we may judge from recent circumstances, the fashion does not seem likely to change.

It is, then, in the relations of the House of Commons to the Cabinet and the crown that the spirit of the Constitution has within the present century undergone the greatest changes. In the supremacy of the People's House British democracy has, for good or ill, found its triumphant expression. That House is largely influenced by opinion from without, and is sensitive to every breath of popular applause or censure. Less than forty years ago a ministry, which had been defeated in the Commons, successfully appealed to the country. Lord Palmerston's triumph in 1857 appears to have been the last occasion when the electors clearly demonstrated by their votes that they were not in agreement with the majority of their representatives. Such an event seems unlikely to occur again.

C. B. ROYLANCE-KENT.

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From Temple Bar.  
HORACE WALPOLE.

HORACE WALPOLE, third son of Sir Robert Walpole and his wife, *née* Catherine Shorter, was born in Arlington Street, 5th October, 1717. The youngest of six children, an interval of more than ten years separated him from his next brother Edward, and it seems to have been not wholly without foundation that the scandal of the day averred that some of "Lord Fanny's" blood flowed in his veins, and that Carr, Lord Harvey, elder brother of the exquisite so brutally lampooned by the immortal satirist of Twickenham, was his real father. Horace was at any rate a Harvey all over, and the marked neglect with which Sir Robert regarded him during his childhood was made up to him by the fond affection of a mother who anxiously watched over her sickly boy with care the most commendable. The first gratification which seems to have made any impression on his mind was seeing the king. Through the intervention of one of the rival sultanas of the Hanoverian harem, the Duchess of Kendal, "a very tall, ill-favored old lady," as she appeared to Master Hor-

ace, Lady Walpole readily obtained the unusual honor for a child of ten years old, of kissing the royal hand. The king, "an elderly, rather pale man, with dark tie wig, plain coat, waistcoat, snuff-colored stockings and breeches," took the boy up in his arms, kissed him, and chatted with him awhile. This was the night before George I. left England on his last journey to his German dominions, whither he was going, it was presumed, to make some inquiries touching the death of his hapless consort, who had been released from her protracted imprisonment a few months previously. On the road he was overtaken by a fatal attack of apoplexy, which lovers of the marvelous described as a visitation of his injured wife from the other world. At any rate, he returned no more, unless, as the Duchess of Kendal surmised (the "Maypole," as she was irreverently styled by Londoners, to distinguish her from Lady Kilmarnock, who was preposterously fat and known as the "Elephant and Castle"), a large raven flying into one of the windows of her villa at Isleworth was the soul of the departed monarch.

Horace was sent to Eton 1726, and here his remarkable progress drew from his father the remark that "whether he had or had not a right to the name he went by, he was likely to do it honor." Three of his companions were distinguished with a fervency of regard unusual even amongst school-boys. The first and dearest of these juvenile friends was Gray the poet. Richard West (his mother a daughter of Bishop Burnet), and Asheton, afterwards a preacher at Lincoln's Inn, completed the "quadruple alliance" to which Walpole refers so agreeably in his early letters. Though he found neither taste nor leisure for boating, cricket, or football, Horace yet led a pleasant life at Eton, and in later years looked back, recalling, like melancholy Gray,

its pleasant shades  
And fields beloved in vain.

In 1735 Horace Walpole passed in due

course to King's, and now commenced that delightful correspondence which has rendered him the most entertaining writer of the last century. At college, as at school, young Walpole appears to have found no gratification in the rude pleasures of his associates. He declares that when he first went up to the university it was intended that he should read mathematics with the famous blind Professor Sanderson; but he had not attended lectures a fortnight ere his tutor assured him that he had no capacity for such studies. Among old companions at Cambridge was Gray, now become a scholar of Pembroke. There was at this time but one difference between them: the poet never liked Cambridge, though in later years he made it his home, while Walpole, writing when an old man (1777), declares that he still dotes upon his *alma mater*, and that the exceeding great beauty of the chapel of King's filled him with visionary longings to be a monk therein. Lady Walpole died August, 1737, and in the following spring Sir Robert Walpole thought proper to enter into a second marriage with a Miss Skerrett (the "Phryne" of Pope's satires), a lady with whom he had already carried on an intimacy by no means to the credit of either party.

That home-keeping youths have ever homely wits, was quite as much the opinion in the days of Walpole as in those of Shakespeare; and a course of foreign travel was regarded as giving a finishing touch to the rough-hewing of school and college. Accordingly, among the passengers who landed, 29th March, 1739, at Calais, after a very stormy voyage, might have been remarked Horace Walpole and his friend Gray. Bound for Italy, the months of April and May were spent in the French capital. September found them rambling among the mountains of Savoy, and in November they crossed the Alps, carried in low armchairs on poles, swathed in beaver bonnets, gloves, and stockings, and protected by muffs and bearskins. On the threshold of the Land of Promise, however, a singular misfortune befell them; a gaunt young



wolf, hard pressed by hunger, sprung suddenly from the covert in the broad sunshine and carried off Walpole's little black spaniel as he frolicked by the side of his young master. Horace screamed and wept, but Gray wrote no copy of verses on the incident such as commemorated the mischance which befell the "pensive Selima," the lord of Strawberry's favorite cat, who was drowned in the china vase. Turin safely reached, on 7th November they passed to Genoa and Bologna, descending ere long through a winding sheet of mist into the streets of *Firenze la bella*, where Horace Mann's servant met the travel-stained youths at the gates and conducted them to the house which was to be, with some slight interval, their home during the next fifteen months. Mann, whom Gray pronounced "the best and most obliging person in the world," was then British resident, and afterwards became envoy extraordinary at the court of Tuscany. He had received his appointment from Sir Robert Walpole, though when he quitted London, 1738, to repair to his post, he little thought that he was destined to occupy it for well-nigh half a century, and that he was never again to set eyes on his native land. In the house of Horace Mann, then, the friends took up their abode. "We get up," says Gray, describing these lotus-eating days in the city of the Medici, "at twelve o'clock, breakfast till three, dine till four, sleep till six, drink cooling liquors till eight, go to the bridge till ten, sup till two, and so sleep till twelve again."

In April, 1741, the friends proceeded to Reggio, where occurred the famous quarrel, which, though healed through friendly intervention within three years' time, was nevertheless the cause of their immediate separation. Twelve years of brotherly intercourse was thus severed in a day, but elements of discord had been long at work, the travellers were unequally yoked, the one journeyed for pleasure, the other for instruction. Gray cared for the beauties of nature, but Walpole lingered in the gallery at Florence and the fair at

Reggio, rather than found delight on his ride to the Grande Chartreuse or a visit to Naples. "I had just broke loose from the restraints of the university," he writes, after the poet's decease, "with as much money as I could spend, and Gray, though infinitely more a man, was yet not enough so to make allowance." Thus it came to pass that Gray went on his way homeward by himself, and Walpole reached England alone in September, 1741, only ten days later than his quondam companion. And now commenced that correspondence with Mann which continued till his death in 1786. The wanderer's heart burned within him at sight of his native land. "The country towns," he writes to his friend in Italy, "delight me; Canterbury, which at setting out I thought deplorable, is a paradise to Modena, Reggio, Parma, etc., but the *summum bonum* is small beer and the newspaper." To which Mann replies, "If we could alter some things (many things), and totally change the climate, England would be preferable to all other places." Forty-three years afterwards the lord of Strawberry writes:—

I have been counting how many letters I have written to you since I landed in England, 1741. They amount—astonishing! to above eight hundred; and we have not met in three-and-forty years! a correspondence surely without parallel in the annals of the Post Office!

Orestes and Pylades [writes Mann, 1780] were nothing to us; they cultivated their friendship personally, but our separation has been so long that perhaps we should not know each other were we accidentally to meet.

As the resident was stationed at Florence partly to report the sayings and doings of the Pretender, Walpole is duly informed of the departure of the son from Rome, January, 1744, disguised as a Neapolitan courier. Mann is half ruined by feasting the crowd of English who visit Italy, "exhibiting themselves for brutes everywhere." Garriek, Wilkes, the "paltry mountebank" Duchess of Kingston and the fallen minister, Lord Bute, are of the



number; the latter told Mann that if he visited Sicily, he would certainly write to Walpole from Otranto, "the scene," continues the resident, "of your charming novel" — an intimation which provoked the somewhat ruffled rejoinder that Otranto is in the kingdom of Naples. Mann figures as a general agent; he sends wine and liquors to ministers at home, knick-knacks to fine ladies, statuettes and articles of *vertu* to half the nobility, besides purchasing pictures for George III., "King There," as some Italians call him, in contradistinction to "King Here," as the same people styled the old chevalier. In subsequent years, when the building of the new Gothic castle at Twickenham was undertaken, Mann exerted himself to assist in its decoration. Among other things he procured from the grand duke's wardrobe the ebony box with silver ornaments, representing the judgment of Paris, and attributed to Benvenuto Cellini; the bronze bust of Caligula found at Herculaneum; the portrait of Bianca Capello from the Vitelli Palace, to say nothing of the famous eagle lately discovered within the precincts of Caracalla's baths at Rome, which stood so long on its altar at Strawberry Hill, and was purchased at the sale by the Earl of Leicester for £210. Now and again Walpole breaks off from the recital of choice bits of scandal to tell his old Florence friend how flourish the lilacs and orange-trees, how the grand staircase approaches completion, and what new glories are being added to his old, old, very old castle. Nor is he altogether behind in the matter of gifts. Among the presents sent to the Residency at Florence was a double Windsor chair; and the ladies and their *cicisbeos* were vastly pleased with a seat so appropriate to their tender whisperings. "The fame of my new double-chairs, which we call *cicisbeatoji*," says Mann, "has put me much in vogue." By and by, the friends begin to feel the weight of years, and each communicates to the other the greater frequency and longer continuance of the attacks of their old enemy the gout, and Wal-

pole has to keep indoors, preferring his climate "framed and glazed." Sometimes he lounged to see his old friend in England. "How sad," he writes, "the thought that you are *never* to see your presents arrayed and displayed here with all the honor I can confer on them." The closing words of a letter, September 5th, 1786, "I am quite exhausted," must have prepared the lord of Strawberry for the announcement that after having remained in a state of delirium for many days, his friend, at the age of eighty-five, had passed away without a pang. We have, however, somewhat anticipated.

When the tall, thin young man returned from Italy, it is hardly to be wondered at that he was more disposed to arrange the cameos and antiques he had acquired than to enter upon a political career as M.P. for Callington, even though stimulated by highly satisfactory evidence of its advantages in the shape of lucrative appointments in the Exchequer. After talk about Domenichinos, Guidos, and Gothic architecture, what a falling off was there in the conversation which the traveller describes so piteously on his return, between men

Who are mountains of roast beef, and only just roughly hewn into outlines of human form like the giant rock of Pratinolo! I shudder when I see them brandish their knives in act to carve . . . I'll swear I see no difference between a country gentleman and a sirloin.

The nights at his ancestral home at Houghton in Norfolk were worthy of being red lettered in the calendar of good fellowship, what time his father Sir Robert passed his holidays bawling after dogs or boozing with Gargantuan consumers of beef and punch.

The summer of 1747 marked an era in Horace Walpole's life, for he then became possessor of Strawberry Hill, originally a little farm which stole somewhat obscurely into existence under the title of "Chopped Straw Hall," having been built, it was said, with ill-gotten gains by a former coachman of Lord Bradford. By and by the place passed into possession of Mrs. Chenevix, who kept a toy-shop in London

in days when toy merchants dealt in other wares besides playthings—in cogged dice for instance, in assignations, masks and dominos—and from her Walpole purchased the property.

The house is so small that I can send it you in a letter to look at [he writes to Mann] a little plaything house, the prettiest bauble you ever saw, set in enamelled meadows with filigree hedges, barges solemn as barons of the exchequer move under the windows, and dowagers plenty as flounders inhabit all around.

But he could not tolerate the name, and so Chopped Straw Hall became Strawberry Hill, a name which he found in one of the title-deeds. The castle was formed at different times by additions to the little old house, and proved the first step to a renaissance of Gothic art in this country. "Every apartment," says Macaulay, "is a museum, every piece of furniture a curiosity; there is something strange in the form of the shovel; a long story belongs to the bell-rope." Here, amid rural sights and rural sounds, we find him restoring the tone of languid Nature: "he has had a sheep shearing, a hay-making, a syllabub under the cow, and a fishing of three goldfish out of his pond, a present from his neighbor Mrs. Clive." The tide of fashionable emigration set strongly in the direction of the new Gothic castle. "We shall soon be as celebrated as Baïe or Tivoli," wrote Walpole. Kitty Clive and Mrs. Pritchard formed a great addition to the society of the place, but the great acquisition was Lady Suffolk, who remembered the mother of George I., had herself been the favorite of George II., and passed her summer at Marble Hill, which cost the king ten or twelve thousand pounds. Pictures, marbles, manuscripts, coins, gems, and articles of *vertu* accumulated in every corner of his Gothic castle, and visitors crowded to see the house, so that its lord wrote, "I wish I could think as an old sexton did at King's; one of the fellows told him he must get a great deal of money by showing it. 'Oh, no, master,' replied he, 'everybody has seen it now.'" Scarcely a month

passes without some important arrival. "Strawberry Hill is grown a perfect Paphos," he writes, June, 1759; "it is the land of beauties—on Wednesday the Duchesses of Hamilton and Richmond and Lady Ailesbury dined. There never was so pretty a sight as to see them all three sitting in the shell" (a seat in the form of a large bivalve). The Duke of York, following the example of his brother the hero of Culloden, visits him, and catches him in his slippers; but like a true courtier, Walpole rushes to the foot of the stairs, kneels down, kisses his hand, and shows him, among other curiosities of the castle, the pictures of the Pretender's sons. One bright summer day in 1767 he entertains a party of ambassadors; French horns played in the cloister during dinner, and after coffee a syllabub was prepared, the cows being brought up to the terrace for the purpose. The Duchess of Bedford begs for a ball at Strawberry, but the proposal is peremptorily vetoed. "Not for the universe. What! turn a ball, and dust and dirt, and a million of candles into my charming new gallery!" "Well, then," says she, "it shall be a dinner." "With all my heart, I have no objection; but no ball shall set its foot within my doors." In 1757 a printing-press was added to the other curiosities of Strawberry Hill, "Elzevirianum" as Walpole playfully called it, and Gray's odes were selected for a first essay in typography. On each side of his bed was hung up Magna Charta and the warrant for King Charles's execution, on which was inscribed *Major* Charta; yet in spite of all his boasted Republicanism, which was really only skin deep, the lord of Strawberry was at heart as thorough a worshipper of courts and courtiers as though he had spent a lifetime in studying the accomplishments of a page of the backstairs.

While the higher circles in Paris were still indulging in a Belshazzar's feast, and unwilling to give ear to the warning words in which he strove to point out the handwriting on the wall, Walpole paid several visits to France.

He arrived in Paris 13th September, 1765, and was enraptured with everything save the dirt and the thieves who boldly stole his portmanteau from his chaise at noon. Unfortunately, like Hume, he could not speak the language. The "silliest Frenchman," he writes to his friend Lady Hervey, who had kindly furnished him with introductions, "is eloquent to me, and leaves me embarrassed and obscure." Sometimes he made ludicrous mistakes, as when the Duchess de Choiseul begged him to forward her *du taffetas pour des coupures*, and received, instead of a supply of court plaster, several varieties of stuff. At first the soft atmosphere of Parisian salons and the freedom of *petits soupers* brilliant with wax lights and odorous with flowers, proved somewhat too dazzling for the dilettante friend of Madame du Deffand. But he quickly felt his way amid all the frivolity and licentiousness, and was shrewd enough to recognize in the boasted philosophy of the time a species of *Aqua Tofana*, tasteless, colorless poison which was slowly but none the less surely eating away the moral existence of the doomed country. Among celebrated characters to be found in Paris about this period were David Hume, a "superficial mountebank," as Walpole styles him, but who was none the less welcome to the beauties, wits, and philosophers who composed French society; Madame du Deffand, the whole of whose papers subsequently passed into possession of her friend, and were sold at the Strawberry Hill sale to Mr. Dyce Semboe for some £160; Hénault, whose suppers were held in greater favor than his chronology; the Comtesse de Boufflers who, during a residence in this country, paid that memorable visit to Dr. Johnson at his lodgings in the Temple; and Madame de Geoffrin, concerning whom the story is told that one of her foreign visitors having one day inquired of her, "What have you done with the poor man whom I always used to see here, but who never spoke a word?" replied with all the *sang-froid* of a Frenchwoman of the age of

Louis XV., "Ah, that was my husband, he is dead." During his residence in Paris, Walpole left off dinners, but sat up late, ate supper, played loo with the ladies, lying in bed next day until he was once again ready to enter upon the same round of profitless pleasure. He quickly became the fashion, "like Queen Elinor in the ballad;" he says of himself:—

I sunk at Charing Cross and have risen at the Faubourg S. Germain; I have been sent for about like an African prince or a learned canary bird, but I shall resign my crown with great satisfaction to a *bonillie* of chestnuts just invented, and whose annals will be illustrated by so many indigestions that Paris will not want anything else these three weeks.

Early in May, 1766, he quitted the fair scene of so much revelry, but three years later he paid another short visit, suffering severely on his return from the inclemency of the weather. During a dreadful passage of eight hours, he was wetted to the skin by rain, had his lap full of waves, was washed from head to foot in the boat at ten o'clock at night, finishing by stepping into the sea up to his knees. Nevertheless, the summer of 1771 found him in Paris again. This time things are worse than ever, the gay butterflies are indeed dancing over a volcano—mere precedence in dancing a minuet was near bringing about a revolution at court; but no one seems to have devoted even a passing thought to the onward progress of that moral earthquake when the "devils should escape out of the swine and overrun the earth headlong." Four years later he visited Paris for the last time, bidding defiance to the element whence sprang the Goddess of Beauty, that he might once again behold his old friend, Madame du Deffand. Like so many others, he too is enchanted with the queen. "Hebes, Floras, and Graces," he writes, "are street-walkers to her, who is a statue of beauty when standing or sitting, grace itself when she moves."

Perhaps no writer ever enjoyed so long and so extensive an acquaintance

with the great folks of the time as Horace Walpole. In addition to having been acquainted with every political leader from Bolingbroke to Pitt and Fox, he had kissed the hand of each of the four Georges, and complimented every court beauty from sweet Molly Lepell and Prior's Kitty, ever beautiful and young, to the Duchess of Devonshire and Mrs. Crewe. His letters are a valuable contribution to the history of the times; never was such a scene of fine dresses, fine jokes, fine equipages, glitter and sparkle as that through which he leads us. It would be vain to search in history for such traits as he records of old Balmerino under sentence of death. When the warrant arrived he was at dinner, and his lady fainted. He said, "Lieutenant, with your damned warrant you have spoiled my lady's stomach!" In the same tone of resolution on getting into the coach he said to the jailer, "Take care or you will break my shins with this damned axe." He descants on the extravagance of the age: a younger brother gives a flower woman half a guinea every morning for a bunch of roses for his buttonhole; West gets three hundred pounds for a piece not too large to hang over a chimney; scarce heads in books sell for five guineas since the mania for Grangerizing; and Wedgwood's Etruscan vases fetch from two to five guineas. Who can forget his pictures of Westminster Hall and its trials, of the Abbey and the funeral of the old king and the coronation of the new, of Vauxhall and Ranelagh, or the sterner representation of the horrors of the Gordon riots, when zeal threw off the mask and owned its name to be plunder, and London and Southwark were in flames? While politics seem to have interested him but little, his voice was always raised on behalf of humanity. He was one of the first to denounce the horrid traffic of selling negroes; while deploring the loss of Kempenfeldt in the Royal George, he felt far more for the hundreds of poor babes deprived of their parents; his Christianity revolted at the propagation of the Gospel by the

mouths of cannon; and when Byng was so cruelly sacrificed to popular tumult, Horace Walpole denounced it as a murder. He foresaw no less clearly than did Chatham the disastrous results of the American War, and as he beheld British troops everywhere defeated, and laying down their arms, what wonder that he was tempted to predict "that we should moulder piecemeal into insignificant islandhood"? His memory has perhaps suffered most on account of his conduct towards Chatterton, yet his sole crime lies in not at once patronizing a young man who endeavored to impose upon him a few stanzas as ancient; and the fate of that unhappy son of genius, "whose ghost with a laurel crown looks out on us in history so pale and sad," is rather at the door of the public at large than of the lord of Strawberry Hill. In the literature of the day Walpole took no great interest, and against most of the literary men he had strong prejudices. "That bear Johnson," he detested, but Spence he deemed "a good-natured, harmless little soul, more like a silver penny than a genius." Dread lest his reputation as a fine gentleman should suffer by his association with that of an author by profession, seems never to have been absent from his mind.

Pray, my dear child [he writes to Mann] don't compliment me any more upon my learning; there is nobody so superficial; except a little history, a little poetry, a little painting, and some divinity, I know nothing. How should I? I who have always lived in a big busy world; who lie abed all the morning, who sup in company; who have played at Pharaoh half my life, and now at loo till two or three in the morning. How I have laughed when some of the magazines have called me the learned gentleman! pray don't be like the magazines.

But while he thus affected to whistle his fugitive pieces down the wind to take their fortune, he none the less in reality watched their fate with all the anxieties of authorship.

As age crept slowly on, Walpole suffered much from the "arthritic tyr-

anny" of gout, by which he had been more or less tormented since he was twenty-five years old; "but never man suffered with more patience," remarks Hannah More, the "sedate Hannah" as he called her. Sometimes he would smilingly observe that he must set up an inn, for he could chalk up a score with more ease and rapidity than any man in England. "I am a statue of chalk, I shall crumble to powder and be blown away from my terrace, and hoary-headed Margaret (his house-keeper) will tell the people who come to see my house — 'one morn we miss'd him on the 'customed hill.'" He tried Bath, but it proved not at all to his taste. "These watering-places," he writes, "that mimic a capital and add vulgarisms and familiarities of their own, seem to me like Abigails in cast gowns, and I am not young enough to take up with either." By degrees the familiar voices which had gladdened the chambers of Strawberry rang through it no more. Of all the celebrities of the Twickenham of long ago, but one now remained, Kitty Clive, the incomparable low comedy actress. Separated early in life from her husband, the brother of Baron Clive, her fair fame was never spotted by calumny. She was bitten by the prevailing vice of gambling, and few better stories are told of her than how, one evening at quadrille, her opponent, a hoary-headed dowager, demanded payment for two black aces. "Two black aces!" cried Kitty, "I'd like to give you two black eyes, you old white cat!" Johnson had a very high opinion of her powers: "Clive, sir," said he to Boswell, "is a good thing to sit by; she always understands what you say;" and she, nowise awed by the great man, used to say of him, "I love to sit by Dr. Johnson; he always entertains me." Walpole frequently refers to her performances — sometimes styling her "the Clive," at others "Muscovita," in allusion to one of her favorite characters; and he wrote the epilogue with which she took leave of the stage in 1769 when about fifty-eight years old.

Here lived the laughter-loving dame,  
A matchless actress, Clive her name;  
The comic muse with her retired,  
And shed a tear when she expired.

Such was the inscription commemorating this accomplished woman on an urn in the shrubbery of little Strawberry Hill, or Clive's den, as Walpole sportively called it, and which afterwards became the abode of the Berrys, his latest friends. It was in the winter of 1788 that Mary Berry, then in her twenty-sixth year, and her sister Agnes, a year younger, young ladies of great mental and personal attractions, first made the acquaintance of Horace Walpole when he was upwards of seventy years of age. An intimacy then commenced which surpassed in tenderness, on his part, the most ardent affections of his youth. The elder sister is *sua-vissima Maria*, "an angel both inside and out;" the younger is "my sweet lamb." Writing to his "twin wives," his "strawberries," as he calls them, in one letter he thanks them for a double missive from "Dear Both," adding playfully that "its duplicity makes it doubly welcome." The death of his nephew, the third Earl of Orford, in January, 1791, made him possessor of Houghton and a coronet, but he never took his seat in the House of Lords, and so lightly did he value his nobility that for many months he merely subscribed his letters, "uncle of the late Earl of Orford."

An estate and an Earldom at seventy-four,  
Had I sought them or wished, 'twould  
add one fear more,  
That of making a countess when almost  
fourscore.

And yet it has always been said that to the elder, and afterwards, when refused, to the younger, of the Berrys he offered his hand and coronet. Meanwhile he still continued to receive his friends with all the suavity of the old school; he begs them not to "my lord" him — "let me be Horace still." The bright days of his youth come back upon his memory, the dead come to life again, and for his dear friends the Berrys he writes his reminiscences of the courts of the first two Georges.



When he died, he left to each the sum of £4,000, and to Mary and Agnes jointly for their lives the house and gardens of little Strawberry Hill, which continued to be their country residence for many years; and when, after surviving their aged admirer for upwards of half a century, they died, both unmarried, within a few months of one another, they were buried in one grave in Petersham churchyard, "amidst scenes," as their epitaph records "which in life they had frequented and loved."

Yet another bright star hovered over the declining years of Walpole's existence—General Conway's daughter, whom he loved as his own, Mrs. Damer the sculptress, to whom for her life he bequeathed his "dear Strawberry," where she lived till 1821, when she parted with it to Lord Waldegrave. After the death of her husband, she passed some winters abroad, and Walpole introduced her to Sir Horace Mann at Florence. She made the acquaintance of Josephine when Madame de Beauharnais, and by her was introduced to Napoleon, to whom she promised a bust of Fox—a promise which was fulfilled during the hundred days when she saw the emperor in Paris, and received from him in return a diamond snuff-box with his portrait, which is now in the British Museum. Among her other friends was Nelson, who sat to her for his bust after the battle of the Nile; but while her energies thus flourished, her cousin was fast declining, and a sense of approaching desolateness and desertion came ever him. "At home," he writes somewhat mournfully, "I see only a few charitable elders, except about fourscore nephews and nieces of various ages, who are brought to me once a year to stare at me as the Methuselah of the family;" and yet he tells Hannah More:—

When one can afford to pay for every relief, comfort, or assistance that can be procured at fourscore, dare one complain? Who has more cause to be thankful to Providence than I? My gout is tolerable, my eyes perfect, my hearing but little im-

paired, my spirits are good, and though my hands and feet are crippled, I can use both, and do not wish to box, wrestle, or dance a hornpipe.

Still he lingered at "dear Strawberry;" well-nigh half a century had he resided there, converting it by pains unwearied into the fairy palace which it had gradually become, making of it a quaint and rare repository of relics such as Wolsey's red hat, the pipe which Van Tromp smoked during the progress of his last sea fight, the spur with which Dutch William urged Sorrel through the waters of the Boyne; and planting with his own hands the acacias which he was still permitted to watch as they waved to and fro beneath the ripening breath of summer. As the winter of 1796 drew on, his friends urged him to return to London, and in the waning light of a brief November day the feeble old man took a last fond look of his "glorious windows," and of the battlements and machicolation which frowned over the lawn. Then he returned to Berkeley Square, whither he had moved after the expiration of the lease of the residence in Arlington Street, bequeathed to him by his father, where on the 2nd of March following he breathed his last, and was buried in the family vault at Houghton, near his father, the last of Sir Robert Walpole's Lord Orfords by the side of the first.

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From *The Nineteenth Century*.

#### NILE RESERVOIRS AND PHILÆ.

BY SIR BENJAMIN BAKER, K.C.M.G.

THE International Technical Commission, appointed by the Egyptian government to consider the various proposals of the engineers of the Public Works Department for the establishment of reservoirs of unprecedented magnitude for the storage of the flood water of the Nile for summer use, has just finished its three months' investigations. Although the report has not yet been published, there can be little indiscretion in referring to its contents, as the desire of the Egyptian govern-



ment and of the public works officers throughout has been for the amplest and most unbiassed discussion of the whole question, so that, in the words of Lord Cromer and of Mr. Garstin, the under-secretary of state, the course followed may be "the one best calculated to serve the interests of the country," and that "what is wanted is that Egypt shall have the best possible reservoir, whether it be in the Wadi Rayyan or in the Nile Valley itself." Having regard to the position which Great Britain at present holds in relation to Egypt, and to the fact that she has assumed the responsibility in the eyes of Europe for the proper management and development of the resources of that country, any proposal of such far-reaching magnitude as the establishment of reservoirs, and the changing the system of agriculture of vast areas of land in Middle and Lower Egypt deserves the most serious and unprejudiced consideration of all thoughtful people in this country. The essence of the question is not whether Philæ temple may or may not be more or less interfered with during British occupancy, but whether, whilst having due regard to the susceptibilities of European scholars and tourists, Great Britain has made the amelioration of the condition of the hard-working and tax-laden labourers of Egypt her first consideration, and has not from timidity or a reluctance to face the opposition of those prepared to fight any British proposal in Egypt, postponed until to-morrow reforms which might have been carried out to-day.

Immediately on completion of the four years' exhaustive study of the reservoir question by Mr. Willcocks, the director of reservoirs, and his large staff of engineers, Mr. Garstin, the under-secretary of state, summarized the results of these studies in a report to the Egyptian government which, from its masterly exposition of essential details and its absolute impartiality, would appear to have been rather the summing-up of one of her Majesty's judges than the report of an engineer. In this report Mr. Garstin suggested

the appointment of an International Commission to revise his own conclusions and those of the engineers of his department, and as a result Sir Benjamin Baker, K.C.M.G., was appointed British Commissioner; M. A. Boulé, inspecteur-général des ponts et chaussées, French commissioner; and Signor G. Torrecelli, professor of agricultural engineering, Italian commissioner. In the course of their investigations the commissioners inspected the Wadi Rayyan depression adjoining the Fayoum Province, or site of the ancient Lake Moeris, and also the route of the thirty-two mile long canal to connect the depression with the Nile, and the whole of the Nile Valley itself as far as the second cataract at Wadi Halfa.

Up to the present time the chief interest manifested in this country with regard to the vast works proposed by the representatives of Great Britain in Egypt for the improvement of the condition of the most needy of the large agricultural class in that country has been in connection with the ruins on Philæ Island. In Egypt, on the other hand, one hears perhaps too little of the ruins, as, in the opinion of those interested, the question of one temple more or less dwindles into utter insignificance as compared with the vast material benefits which even the most ignorant of the fellaheen know must result from the establishment of a Nile reservoir. This marked contrast in the views of the two countries no doubt must appear strange to the middle and upper classes of the natives, who are constantly being reminded that England is in Egypt, not for her own benefit, but in the interests of Egypt herself. It is, however, doubtless only a temporary phase of feeling in this country, due to an imperfect knowledge of the circumstances of the case. On first impulse probably ninety-nine out of every hundred cultivated persons would say Philæ must not be touched. On a thorough examination of the facts, however, it is no less probable that the same percentage of persons would endorse the conclusions of the Public Works Department and

the majority of the foreign commissioners, that some interference with Philæ is an absolute necessity in the interests of Egypt.

To understand the Egyptian way of looking at the question, let us assume, for example, that the London County Council had discovered some cheap and easily executed plan for clearing the Thames of sewage, annihilating London fogs, and at the same time solving the great problem of agricultural depression throughout the country. Incidental to this scheme, however, there was involved an interference with some picturesquely situated ruins—say Tintern Abbey on the Wye, which the guide-books tell us are “from the beauty of the situation and the elegance of the building, the most romantic Cistercian ruins in Britain.” Should we not deem it very unsympathetic, to say the least, if the American public, instead of congratulating us upon the good things in store, called us “vandals” and other uncomplimentary names because we ventured to contemplate any interference with ruins which they visited and appreciated so much? This, without exaggeration, is in Egyptian eyes a parallel case to the Nile reservoir and Philæ question, and it is no wonder, therefore, that some disappointment is felt in Egypt at the way in which the latter has hitherto been discussed in England, and the sooner this is set right by dealing with the subject on a broader basis, the better for all parties.

All reasonable men—and in no matter is it possible to satisfy faddists—will agree, whether they be artists, archæologists, or engineers, that if a reservoir be absolutely essential to the development of Egypt, and no other practically available site exists than the one involving an interference with Philæ, then all the sacrifice that can be legitimately demanded of Egypt is that the interference shall be the least possible. This is in accordance with the action of Parliament in this country in relation to railways, the construction of which constantly and inevitably involves interference with cherished

objects and the destruction of the picturesque. It is in accordance also with the course followed by other nations—notably in the case of the Tiber improvements through Rome, where, to facilitate the discharge of the flood waters, several of the historic bridges have been pulled down and rebuilt with the original stones, but on deeper foundations. The most important and responsible duty of the International Commission, therefore, was first to satisfy themselves that a reservoir of some kind was a necessity; and secondly, if so, whether it could not be placed elsewhere than at Philæ.

The government engineers submitted four projects to the Commission; but, reading between the lines, it was clear enough that they had little confidence themselves in the practicability or expediency of three out of the four plans, and they expressly threw the final responsibility of rejection upon the Commission. The questions to be considered by the Commission, at the request of the government, were five in number. (1) The proposal to construct a dam at some point of the Nile between Wadi Halfa and Cairo, and to form a storage reservoir in the valley of the river itself. (2) The proposal to construct a storage reservoir in the Wadi Rayyan depression in the desert. (3) An examination of all the designs, plans, and estimates prepared for the different projects. (4) An opinion as to whether the sanitary condition of the country will be affected in any way by the storage of such a body of water as is now proposed. And (5) A selection from among the different projects which have been submitted for the information of the Egyptian government. It will be observed that the question of Philæ temple was not referred to the Commission, but, on the contrary, it was expressly stated elsewhere in the report that “this was a question for the government to decide.” Neither was the question of the necessity of a reservoir referred to them; but yet it was, of course, absolutely impossible for them not to have these two questions ever present in their minds.

As regards the absolute necessity for the construction of a reservoir with the least possible delay, no shadow of doubt was expressed by any member of the Commission. The estimated direct ultimate annual return to the State was over three-quarters of a million sterling, and the increased value of the crops would result annually in a benefit of ten times that amount to the cultivators. Making every allowance for possible errors in the estimating, the margin of profit would still be so enormous that no project could be suggested in any part of the globe which would at all compare, as regards financial results and benefits to the country at large, with that of the Nile reservoirs. This being so, it may reasonably be demanded by sceptical financiers why this mine of wealth has been so long neglected, when even central Africa is being exploited by all the European powers. The answer is simple. Until the barrage at the apex of the Delta had been sufficiently strengthened by Sir Colin Scott Moncreiff, and Colonel Western, to enable the whole of the existing summer supply in the Nile to be thrown on the lands, it was useless to augment that supply by the construction of reservoirs. The barrage referred to was built forty years ago by an eminent French engineer, Mougel Bey, but from the reckless rapidity with which he was compelled to carry on the works it was a practical failure until the past two or three years. At present, however, by its means every drop of water at low Nile is thrown upon the lands, and so valuable is the water that the sluice-gates are even caulked with rags to stop the smallest waste. Notwithstanding this, the demand for water by the cultivators is as great as ever, and no means exist for satisfying their wants but by storing up the water which runs uselessly to sea during the flood for use when most required. By the construction of the proposed reservoirs the flow down the Nile when water is of the highest value will be considerably more than doubled, so no detailed calculations are required to show that the direct and indirect

returns to Egypt must be enormous, and that the condition of the cultivators will be vastly improved. To illustrate the extent of the change it may be mentioned that Mr. Foster, the inspector-general of irrigation for Lower Egypt, estimates that in the small province of Giseh alone the area under summer crops will be increased from five thousand to sixty thousand acres, and as the average value of the summer crop is no less than 10*l.* per acre, there would be a nett increase of over half a million sterling in that little district itself.

It was easy enough, therefore, for the commissioners to satisfy themselves that they could not evade the difficulty of selecting a reservoir site by saying that no reservoir at all was necessary, and it devolved upon them to consider in full detail each of the four projects prepared by the government engineers, as well as any others that might occur to them as a result of their own personal inspection of the Nile Valley. The first project examined by the Commission was Mr. Cope Whitehouse's Wadi Rayyan reservoir, which, as all the world knows, consists in the conversion of a deep depression in the desert, discovered by him, into a vast lake of nearly three hundred square miles area. If the British commissioner had any views on the question of Nile reservoirs before undertaking the investigation of the problem, he must confess it was in favor of Mr. Cope Whitehouse's brilliant and original suggestion, and it was a matter of regret to him that as the investigation proceeded one difficulty after another appeared, and so the realization of the scheme was rendered far less easy than he had originally anticipated. Coming fresh from experiences on the Manchester Ship Canal, he knew that nothing was more difficult to estimate than the apparently simple work of an excavated channel for water through doubtful soil; and in the case of the Wadi Rayyan project the depression was so remote from the Nile, and the depth of cutting for the connecting canal was in places so great, that the

cost became excessive, due regard being had to the contingencies attaching to the work. The commissioners were unanimous in the opinion that the government engineers had largely underestimated the cost of the Rayyan project; but it was explained to them that the engineers were specially instructed, in cases of doubt, to give the advantage to the project, so that it might not be said that they were biased against Mr. Cope Whitehouse's scheme. Apart from cost, moreover, the commissioners were unanimous in the opinion that, even if executed, the Rayyan reservoir would not meet all the requirements of Egypt, and that certain elements of doubt attached to it as regards the supply of water at critical times and the effects of percolation.

The second government project examined by the Commission was that for a dam across the Nile Valley at Gebel Silsila about fifty miles down stream from Philæ. At this point the rock was found to be inferior sandstone with bands of clay, easily acted upon by water, and the commissioners were unanimous in rejecting the government project on the grounds of insecurity alone, quite apart from other important objections, such as great depth of water and narrow width of river between the high banks. The only other alternative government project to that of the Philæ dam was a dam at Kalabsha, about thirty miles above Philæ; and here again, although the quality of the rock was all that could be desired, the depth and width of the river were such as to render the construction of the government dam, as strengthened and otherwise modified by members of the Commission, absolutely impossible on financial grounds alone, apart from engineering difficulties.

Up to this point, the British, French, and Italian commissioners, it will be observed, were in accord in rejecting the government projects; but here the divergence of opinion occurred. The French commissioner continued his objections to the whole of the proposals, whilst the British and Italian com-

missioners were unreservedly in accord with Mr. Garstin and Mr. Willcocks, and indeed with the whole of the government engineers, in the opinion that the Philæ site offered all the advantages desired by an engineer for the construction of a dam at reasonable cost and of a stability which under every condition should be beyond all doubt. Nowhere else in the whole of the Nile Valley did they find such advantages of site: sound rock, numerous islands, a wide section, so that the action of the water issuing from the sluices would be minimized, and shallow water in which to work. As regards details of construction, the British and Italian commissioners required certain modifications in the government designs, with a view to give increased security, and these modifications were accepted by Mr. Willcocks without reserve as important improvements on the original designs—in the preparation of which, it is only fair to say, the government engineers were hampered by certain instructions given to them to adopt the same type of construction for all the different sites, to facilitate the making of comparative estimates. The original plans having been published in several of the illustrated journals in this country, it may be well to state that, in the designs as now approved, the openings through the dam for the discharge of the Nile water, which in times of excessive flood may amount to the enormous quantity of fourteen thousand tons per second, have been very much reduced in size and correspondingly increased in number, so that the force of the issuing water may be more distributed; and further, that the whole of the openings will be lined with cast iron, one and a half inch thick, so that no stone can be torn out, or piece of masonry destroyed, by the constant impact of large volumes of water at high velocity. Again, the width of base of the dam has been increased, so that the pressure on the solid granite masonry will be less than that on any of the great dams in the world. The security of the dam has thus been doubled at an increased cost

of about twenty-five per cent. on the original estimate of 1,600,000*l*.

The French commissioner did not join in the detailed criticism of the construction of the Philæ dam, as he rejected this site at once on the sole ground of the presence of the temples, which unless removed or raised would be partially submerged for some months in the year. It is true that the question of the temples was expressly reserved for the government, and not for the commissioners, whose individual opinions on such a subject were of course not worth more than that of any other three men. However, it was satisfactory to the British and Italian commissioners to know that any objections their French colleague had to their proposals were not based on engineering grounds, and as regards the Egyptian government previous experience with mixed commissions had warned them that a wholly unanimous report was not to be expected, so no disappointment was experienced. That there are two plausible sides to every engineering question is evidenced clearly enough by the proceedings in parliamentary committee-rooms; and under present political circumstances it would be as hopeless to expect an engineer representing one country in Egypt to be cordially in accord with engineers representing certain other countries, as it would be to find the engineers of two rival lines of railway promoting bills in Parliament in accord. Nor is this any practical detriment to the elicitation of the truth, which was the primary object of the Egyptian government in the appointment of the Commission, for the criticism of an able man opposed to a scheme would naturally be more searching in many points than that of a critic not so opposed, and any defect which might exist would be sure to see the light. The government project for a dam at Philæ, as amended by the British and Italian commissioners, having been subjected to such criticism and proved absolutely unassailable both on engineering and financial grounds, the aim of the government in the appointment

of the Commission was therefore completely attained.

The outcome of the Commission, briefly summarized, is that the whole of the commissioners are unanimous in recommending the construction of a reservoir in the Nile Valley, and the majority of the commission are absolutely convinced that it is practically impossible to place the dam elsewhere than at Philæ. The French commissioner claimed that "impossible" was an unknown word to French engineers; but the British commissioner thought it was often a very useful word in relation to practical problems, and he had indeed used it himself with good effect some years ago when reporting to a group of financiers on the Panama Ship Canal. The French commissioner thought that the engineers and contractors throughout Europe should be invited to study the Nile reservoir question and send in competitive designs, but the majority of the Commission were satisfied that this would only be useful if delay were the object, as the question had been exhaustively investigated by the government engineers for four years, and the members of the Commission themselves were unable to suggest any reasonable alternative after going over the whole of the ground. The French commissioner under reserve made certain suggestions as to alternative projects; but approximate estimates, prepared at the request of the majority of the Commission, showed that, even if practicable, the cost of the cheapest of these alternatives would be several millions greater than that of the Philæ dam, so that the projects were "impossible" in the ordinary meaning of that useful word. Apart from cost, moreover, the type of dam proposed by the French commissioner was such as neither the government engineers nor the majority of the commissioners could accept. The latter maintained that if you ask people to live below a dam holding up three thousand million tons of water to a height of eighty feet above their heads, you are bound to make the safety of the dam your first consideration, and, to attain that, the more your



dam resembles a massive ridge of rock springing from the rocky bed of the river the better. The French commissioner, on the other hand, proposed an open dam, or *barrage-mobile*, made up of isolated narrow piers with numerous sluices sixteen feet wide and up to eighty feet in height. In the opinion of the British commissioner a slight tremor of earthquake, such as the Parthenon has recently experienced, the explosion of a boatload of powder dropped down the river by a few dervishes, or of a high explosive shell fired against one of the sluices or placed in position by an Anarchist, would suffice to destroy one of these huge sluices, and then the rush of the impounded waters would throw down each pier and sluice in succession and the country below would be devastated. These details are of interest only as illustrating the kind of difficulties which arise when an attempt is made to devise a dam at reasonable cost elsewhere than at Philæ. But it is hardly necessary to say that every patriotic Englishman would rather see the stones of Philæ temple broken up for concrete than allow Egypt to be involved in financial ruin either by embarking in an enormously costly scheme, or by building a structure of doubtful stability, so long as his countrymen have the leading voice in the management of Egyptian affairs.

Such being the facts of the case, and the whole of the responsible engineers of the government and the majority of the commissioners being in absolute accord on all points, what is the conclusion to which the average common-sense individual must inevitably ultimately be driven? It has been proved beyond dispute that the establishment of a reservoir in the valley of the Nile is a pressing necessity which will result in incalculable benefit to the country at large, and that at Philæ alone are found the conditions necessary for the building of an absolutely safe and reasonably cheap dam. The dam, therefore, must be built at Philæ, and with the least possible delay, or in the event of the occurrence of one or

two "bad Niles," and the loss of several million pounds' worth of summer crops, Great Britain will be morally responsible for the loss and individual suffering. Lord Cromer, Sir Edwin Palmer, and others, representing Great Britain in Egypt, together with Nubar Pasha and his ministry, can and will do the work in spite of all opposition, but the former will look for, and doubtless obtain, the encouragement and support of the home government and of every well-wisher of Egypt in this country.

As regards Philæ temples the matter stands thus: The under-secretary of state and the commissioners have stated in no equivocal terms their appreciation of the importance of the question. The British commissioner has personally examined the ruins, and is in the possession of plans showing every detail. He is of opinion that the solidity of their construction, the absence of windows, and the solid rock foundation, render it far easier to raise these temples bodily than any of the buildings he has seen so dealt with in America. The well-drilled garrison at Assouan would be delighted to work the elevating screws with military precision, and no doubt can be entertained as to the success of the operation. When raised, the ruins surely must be of greater interest to any intellectual tourist than before. Half of the wonder and admiration excited by the monumental works of ancient Egypt arises from the magnitude of the masses handled and transported by the old Egyptians rather than from their artistic merit. It would be in accord, therefore, with the spirit of the surroundings if English engineers raised tens of thousands of tons where the Egyptians raised hundreds. From the archaeological point of view the condition of the temples when raised would be unchanged, as every stone would remain as originally laid by the builders, and as shown on every drawing and photograph. From the artistic point of view the appearance would be enhanced, because the temples would rise out of a wide, placid lake, whereas when now visited by tourists the Nile

is low, the stream insignificant, and Philæ island appears to stand in a hollow. It is true that careful levelling would show that the floor of the temples stood some three hundred and eighty feet above the Mediterranean, instead of three hundred and forty feet, and that fact may be fatal to the project in some minds. Whether, on being told that the temples had been raised bodily the visitor would exclaim "How wonderful!" and examine the ruins with renewed interest, or whether he would say "What Vandalism!" and return indignantly to his "Cook's steamer," would depend upon his individual temperament. However, if the temples are neither to be raised, removed, nor occasionally flooded, the only course will be to find some other site for a reservoir, and to induce the British Parliament to contribute the extra cost of three or four millions sterling, or to raise that amount by public subscription, for Egypt certainly will not find the money. Such being the present state of affairs, lovers of Philæ may do well, perhaps, to remember that under some circumstances "silence is golden," and that the present may be such an occasion. The cost of raising Philæ temples is included in the estimates submitted to government, and possibly not too much curiosity will be evinced as to how the sum intended for compensation for property and buildings is made up. If, however, there should be a great deal of talk about Philæ, it is not improbable that the natives, who care not a piastre about the ruins, may suggest that those who do should find the 200,000*l.* required, and not the Egyptian taxpayers.

Hard words have been used in connection with Philæ, but it is to be hoped that with a better knowledge of the facts this will cease. To call an engineer a "Vandal" because from the force of circumstances he is compelled to interfere with an interesting ruin, is as silly and offensive as to style a man a "snob" because from causes beyond control he is compelled to wear a shabby suit of clothes. Mr. Willcocks,

the director of reservoirs, has personally inspected every yard of the Nile Valley, and tramped the adjoining deserts for hundreds of miles under circumstances often of great hardship, with the view to find, if possible, an alternative to the Philæ reservoir; and the labors of the other engineers of the Public Works Department in the same direction acquit them of all charge of Vandalism.

The conclusion to which most Englishmen will come after a careful consideration of the facts relating to Nile reservoirs and Philæ probably will be that the whole question may be safely left in the hands of their able and tried representatives in Egypt, whose successes in the past in the face of the most persistent opposition, and whose intimate knowledge of the requirements of Egypt, constitute them far better judges of the best policy to adopt than any individual or body of individuals in this country could be. The work will be an arduous one, but the representatives of Great Britain in Egypt are men of exceptional zeal and ability, who can be relied upon to bring any work they undertake to a satisfactory conclusion, whatever may be the personal sacrifices involved or opposition encountered.

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From Macmillan's Magazine.  
THE CLIFF-CLIMBERS.

I.

CREGBY is curiously placed high up on a plateau overlooking the sea. All round the village there is rich farming land, but this ends suddenly to the eastward in a great pale wall of limestone overhanging the sea for several miles with never a break, and forming between the plane of the land above and the plane of the water below a curious vertical world, some hundreds of feet in depth, which belongs to neither. Hither in the breeding season come myriads of sea-birds—guillemots, razor-bills, puffins, and kittiwakes—in obedience to an instinct which is older than all human history;

and here on the bare ledges of the cliffs they lay their great eggs and seek to rear their unshapely chicks. For these eggs there is always a ready sale, and it has been the custom of the villagers for many generations to gather, in due season, this harvest of the rocks during six weeks of every year, in June and the early part of July, earning thereby a greater profit than their ordinary field-labor would give them. This harvest is regulated by ancient custom, and by some curious unwritten law of Cregby certain families have the monopoly of it.

One of the most ancient stems of this climbing aristocracy was the family of the Cowlheads. So far back as the parish registers reached, or the grave-stones in the little churchyard were decipherable, there had always been Cowlheads in Cregby; and no one has ever heard of a time when the right to climb the very best part of the cliff has not belonged to them.

Yet in the course of ages it happened to the Cowlheads, as to many another ancient family, that the stock grew feeble, and it had come to pass that although there was still nominally a Cowlhead gang, its leader bore another name. At the time referred to there was but one Cowlhead who climbed, and he, Simon, was a raw youth, clever enough with the ropes as every one owned, but for the rest entirely lacking experience and common sense. So young a man would not have been accepted by the other climbers had it not happened that he was the only one of the family available. His father, Dick Cowlhead, a dull, heavy man wanting in enterprise, had gone to the cliff for several years, but had made no headway, and willingly sank under the guidance of an energetic new-comer without any hereditary claims, a new-comer who was at first only a stop-gap, taken on when another of the old families "ran to women-folk," and could supply no climber. And while yet in his prime the rheumatism (no doubt, had he been a richer man, the doctors would have called it gout,) had stiffened

Dick's limbs so that he could no longer work the rope; after which there was nothing for it but to leave climbing and confine himself to such field-work as he could do. But that the family might not altogether lose its much-needed share of the egg-money, it was agreed that his eldest son Simon, a lad of sixteen, should be admitted into the gang.

This lad was by no means a favorite in the village. It was his unhappy fate to have been born with an ancestral taint in the form of an uncontrollable predilection towards waggery, while for the rest he was unfortunately like his father, exceedingly dull and stupid, a heavy-faced, tow-headed country lout of the most pronounced type. Now a joker *with* wit is often more or less of a nuisance, but a joker *without* that quality is always an absolute infliction, especially in a country place. And as the playfulness of a young bullock was grace itself compared with that of young Simon Cowlhead, it is not at all surprising that the inhabitants of Cregby came cordially to detest this ungainly youth, and to visit their displeasure at his mischievous pranks upon various parts of his youthful anatomy. It may be readily imagined that this youth was from the first a constant source of anxiety and annoyance to the shrewd and energetic John Bower, the man who had worked his way to the head of the gang.

The methods of the climbers are so simple and secure that accidents are of rare occurrence. Such as do happen are chiefly small injuries from falling stones dislodged by the friction of the rope as the climber swings himself below. Of the three men who form a gang one descends to do the actual work of gathering the eggs, while the other two remain above at the more arduous, if less dangerous, task of lowering and hoisting their comrade. At the spot selected for a descent a stake is driven into the earth near the edge of the cliff, and to this stake a stout cord is fixed. This is the hand-line, which serves for signalling and to relieve the strain on the main cord. Then the man who is to descend ad-

justs about him a double loop of rope, or short breeches of canvas, at the end of the much stouter climbing-rope, and sometimes may further secure himself by a strap passed loosely round the hips. All being ready, the climber taking up the hand-line walks down the short slope which caps the precipice, passes over the verge, and is lost to view, while his two comrades, seated above, with feet well planted in little pits cut out of the turf, brace themselves to their labor, making of their thighs and bodies a living brake. And thus they hoist or lower the climber, according to the nature of the signal which he gives. If he be skilful the man below will greatly lighten their labor, by supporting the greater part of his weight on the hand-line at the instant that their effort on the main rope is felt. To work thus in rhythmical unison with the men above, to watch and avoid those terrible missiles, the falling stones, to prevent the twisting of the ropes, and, by keeping the feet in touch with the cliff (for which purpose the legs must be held almost horizontally), to avoid bruising the body and smashing the eggs against the face of the rock,—these are things which mark the expert in cliff-climbing.

Now it is not given to every one, not even though he be born in the village of Cregby, to swing at ease, a living pendulum, at the end of two or three hundred feet of rope with a great precipice still below you, and the blue sea, so strange and dizzy to look upon from this point of view, beneath and around you. Hence when after the two first seasons young Simon, upon trial below, proved, to the surprise of his companions, as capable there as he had been lazy and incompetent at the top, John Bower wisely made the most of the lad's faculty. "He's good for nothing at aught else, so we'd better keep him below," he remarked to his mate.

This arrangement was entirely to the lad's satisfaction. He revelled in the work, for the excitement of it stirred fresh life in his clumsy frame. To any one who had beheld his sluggishness

on land, the grace and dexterity with which like some wild ape he bounded from ledge to ledge in that strange middle-world would have seemed incomprehensible. John Bower's explanation was that "climin' was bred in the bone."

Even when the season was over, and the ropes carefully coiled and housed till another year, Simon could not be kept from off the cliffs. He would slink away from his proper work on every opportunity, in spite of his mother's tongue and his father's hand, to enjoy the dangerous pleasure of scrambling along the face of the precipice wherever he could find hand-grip and foothold.

But in the fifth year of his climbing, when the youth had already begun to think himself a man, a terrible occurrence prematurely ended his career in the cliffs.

The Cowlthead gang had worked nearly the whole of that fine June day with excellent results. Towards evening John Bower said, "We'll just try Fowerscore, and then go home." It may here be observed that we have taken such liberties with the speech of John Bower and his mates as may render it intelligible to those who know not the tongue of Cregby.

"Nay," said Simon, out of temper at a recent rough reproof of John's for his careless handling of some eggs, "I've done enough for to-day. Leave Fowerscore till to-morrow."

But John Bower was masterful, as became the chief of a gang. "If thou won't climb Fowerscore, I'll climb it myself," said he. And he led the way to the place.

Now this Fourscore was one of the most difficult spots in the cliff because of the great overhang which the upper part of the precipice had at this point. For this reason the attempts of the climbers to reach its ledges had, until a short time before, always failed. Here the birds, finding themselves undisturbed, clustered thickest, until every square inch of rock flat enough to support an egg had its occupant, and the possessors of places had to do con-

tinual battle with their envious and less fortunate sisters for their right to remain. But three or four winters previously the frost had dislodged a great slice of rock from the brow, and in the following season John Bower, taking advantage of this fall, had descended, and by a long in-swing had gained footing on the ledges, where a rich harvest awaited him. Into the bags slung on either side of him he counted eighty eggs, and with this as a sufficient load, considering the nature of the ascent, he returned to the top, and twice again descended for fourscore more. After that the climbers regularly visited their freshly conquered territory, and whoever descended would have counted it shame to return without a full burden; wherefore as Fourscore the place was known.

When they reached the spot, Simon stood sulkily aside while John and his mate made their preparations. Soon all was ready, and the elder had begun to adjust the rope upon himself, when the young man with a bad grace grew jealous and yielded. John handed it over to him at once, and the lad took up the hand-line also and steadied himself down the short upper slope.

"Mind to kick all loose stones down as thou goes, lad, and see that the rope don't rub on them sharp edges below thee, and mind the lines don't swing out o' thy reach when thou lands," was John's admonishment as the young man disappeared over the verge. Then the men at the top braced themselves to the strain, John sitting first with heels well set.

For a short time the rope was paid away in little jerks, showing that Stephen had still some hold of the cliff with his feet. "Steady now!" cried John, who had been carefully noting his course. "He'll swing clear in another minute," and as he spoke the rope suddenly became taut. "Let him have it as he swings," he exclaimed; and then at each sway they let out the slack more and more rapidly that the climber might pass the deep bight before the cords began to twist. "Now he's touchin' again!" said John.

"Now he's landed! That's all right!" The rope hung slack now, and they knew that Simon had reached the broad ledges and made fast his lines, while he moved independently and comfortably along, gathering his spoil two hundred feet below. But a longer pause than usual followed. "He's restin' a bit," was John's interpretation. Then the cords showed motion again, and immediately a sharp shake of the hand-line gave the signal for hoisting, and the two men began to tug with all their might upon the main rope. It was not light work to raise the weight of a man, with the added weight of a cable, vertically from such depths, and the two men breathed hard as they pulled. They had recovered only a few feet when John was aware of something wrong below. "He lifts unaccountable dead an' heavy," he panted. "He can't be —," with a jerk he had tumbled back on the grass, the other man lay sprawling behind, and the rope made a great leap and then shook lightly and loosely at the cliff edge.

"My God," said John hoarsely. "It's broken!" In a second he was on his feet and the slack was spinning up through his hands as if it were under the drum of some swift machine. Speedily the end of the rope all frayed and torn came up the slope. "Surely he's stuck to the hand-line!" cried the man in despair, and he seized that cord. But there was no resistance upon it, and in a moment it also lay in a useless coil at his feet.

"Run out to yon nab, Jacob, for heaven's sake, and see if you can't see the poor lad!" And he himself, all shaking, ran out upon a narrow spur in the opposite direction. He crept down the upper slope, and hung most perilously over the very verge with only a handful of grass holding him back from destruction. "Oh, Jacob! can you see aught?"

"Oh, John, nought at all!" came back the woeful answer from the other spur.

"Lord help us, neither can I! Back, man, quick! I must go down!" and



he crept up the slope again and ran to the ropes.

"But can I hold —" began his companion.

"Never mind buts!" cried John as he bent a loop on the broken end. "It's no time for buts; manage as best thou can!" With that he slipped his thigh into the noose and with the hand-line in his grasp went over the edge, while the other man held on for the life of both of them. Once and again he swayed as though the running rope must drag him headlong down, but almost instantly the pressure was relieved, and he knew that John had reached the ledges. Anxiously he waited, and by and by the signal for hoisting came and he bent every nerve and muscle to his task. But there was no double load on the rope. Slowly and slowly the slack gathered, until at length John's grave, weather-beaten face appeared above the edge. "There's nought to be seen down there," he said, "nought at all. You be off as sharp as ever you can to South Bay and get 'em to bring a boat; quick! tide's coming up fast! And I must go and tell his poor mother and father."

So they hurried away each on his sad errand, while the young man whose mangled corpse they believed lay under the plashing waters below, crouched safely in a deep crevice half-way down the steep, and chuckled with the delight of a born humorist at the magnificent success of his little joke. It had so nearly been a failure too, for after he had carefully hammered out the substance of the rope across a sharp rock, leaving just one strand unbroken which he was sure would give way with the slightest strain and so complete the illusion, he had given the signal to the men above, and found too late that he had miscalculated the strength of that good hemp fibre. He felt himself being slowly dragged from the ledge, and had just time to grasp the hand-line at the instant that he was launched away into the air; and when, a moment later, the strand yielded, it was only his hold upon that

slender line which saved him from making in stern reality that dreadful plunge of two hundred feet from crag to crag into the sea below. However, for one with Simon's training it was not a very difficult matter to swing himself in again, and he landed on the ledge with a rebound. But the scare took hold of him, and when he had crept into his dark crevice he was glad enough to find himself out of sight for a while of the terrible wall and the pale sea.

Not until he had enjoyed the spectacle of John Bower's pale and awestruck face, which he saw distinctly as it swung in mid-air before the mouth of his crevice, did he quite recover his spirits. He found it then really hard work to stifle his mirth, until it struck him what a terrible business there would be if John should discover him, and that kept him very still until the danger was past. After that he gave himself up to a complete enjoyment of the situation. This splendid plot had occurred to him quite suddenly as he had descended. It was really a most excellent way of getting even with them for sending him, and he would have the laugh of them all. He had discovered that, though Fourscore was such an awkward place to get into from above, when once landed you could travel with ease for quite a long distance along the ledges, and that in one direction rising steadily step by step, you might even reach a little notch up which it was comparatively easy to scramble to the top of the cliff. He had kept this piece of information to himself, pleased to think how in some respects, at any rate, he was ever so much wiser than the generality of folk; and now he meant to make use of it. When he had given John and the rest of them fright enough, he would scramble up and saunter off home as though nothing had happened. And he would not tell them how he had managed it either.

Such was Simon's pretty scheme, but somehow things did not turn out quite as he expected. In the first place, that sideway climb along the

ledges, now that he was compelled to make it, was by no means so simple as he had reckoned upon. When he crept out everything seemed so lonely and still, in spite of the noise of the birds and the wash of the sea below, that it troubled him, and he started violently at such simple and usual things as the whirring of a scout's wings close above his head. Then he discovered that the very ledges, along which ordinarily he would have passed as easily as upon a roadside pathway, were bristling now with difficulties, and when he thought of the far more dangerous places ahead of him he actually shuddered. Clearly until he felt steadier it was no use attempting to tackle them. So finding another cranny wherein he could stretch his length he lay himself down fairly tired, and fell fast asleep.

He did not know how long he had slept when he was awakened from unquiet dreams by the dip of oars and faint sounds rising tremulously from the sea. He heard a sobbing voice and knew that it was his mother's. "My poor bairn! My poor bairn!" it constantly repeated, and then there came the deep, broken tones of his father trying to comfort her. "Is this the spot?" asked a strange voice. "Ay! this is where it happened, just to the left of yon green patch," replied another, which he recognized as John Bower's; and then his mother's pitiful refrain broke in again, "My poor bairn!" It turned Simon cold to hear it.

From his cranny he could not see the boat, but evidently it came as close in as the swell on the rocks would permit. Every sound from it swam up to him, thin, yet very distinct. "Poor lad!" he heard the boatman say. "The sea's gettin' what was left of him; it would carry him south'ard wi' this tide. I fear no mair'll be seen on him." And then the sobs and the wail of his mother rose up again, and this time no one tried to soothe her. Simon lay dazed and shivering, not quite realizing it all, and before he was fairly conscious of his position the sounds

had grown fainter and fainter, and the boat had moved slowly off to southward.

Then it began to dawn upon him that perhaps this wasn't going to be such a splendid joke after all. He sat up and began to ponder in his slow way how it was going to end, and somehow became very uncomfortable. It was very lonesome there. The sea-birds on the ledges all round him cluttered and laughed and barked after their own peculiar fashion, and it struck him that they knew his plight and were mocking him. The woe of his mother still rang in his tingling ears. How could he go home and tell them that he had fooled them? Never, never now dare he do that! But what should he tell them then? Ay, that was going to be a very knotty point! The thought of having to face John Bower's cross-examination with anything less than the truth was positively terrible; he durstn't risk it! Yet to tell the truth was impossible. The more he pondered over it the greater became his perplexity, until he burst into a sweat of remorse and shame. And by and by the birds ceased their cries, all except a single one here and there whose chuckle came strangely to the ear like a nightmare, and the long twilight faded gently, and faint stars twinkled in and out over the sea, and yet his puzzle was not solved. The night brought a feeling akin to relief to him; since now at any rate he must have a few hours respite, for it would be sheer madness to attempt to scale that cliff in the dark. In silent dejection the lad shrank back within his shelter to wait for the morning. The pale flush in the western sky crept round to the north, where he could see it over the sea; and then very slowly moved eastward, gradually gathering strength as it came, until at length under his weary eyes the rocks below lost their blackness and began to look cold and grey in the moist light of dawn, and the crags above him, which all night had pushed out mocking faces whenever he had ventured to look up at them, drew themselves together, stern and decorous, ignoring their mid-

night antics. Then the guillemots and razor-bills began to wing their labored flight straight out to sea, and their yelping and chuckling began again. A broad-winged gull passed slowly by, as if but half awake, and then a silent, thievish jackdaw.

Simon arose now and stretched his cramped limbs. He was aware of keen hunger and bethought himself of the egg-satchels still hanging across his shoulders. He had placed a few eggs in them almost mechanically in passing along the ledges, and a couple of these he broke and swallowed and felt his courage revive. The bags he flung away from him, and they fluttered out and fell into the sea.

Then he crept forward, setting his fingers hard in the crevices, and rose thus steadily ledge by ledge, till the last perilous step was achieved and he reached the dewy slope at the summit. Once in safety his heart gave way, he flung himself face downward into the dank herbage and burst out in a paroxysm of grief. "What shall I do?" moaned this wretched humorist. "What ever shall I do? I never dare go home again! I daren't, I daren't!"

Thus he lay while the daylight brightened, and presently across the rippling water glinted the dull bronze disk of the sun. Then he knew that the village would soon be astir, and that he must remain there no longer if he would avoid discovery. So he rose and shrank off inland under cover of the hedgerows, fetching long circuits to shun the farmsteads; and before the teams were fairly at work on the land he had put several miles between himself and his folk, and still plodded aimlessly forward along the green byways.

## II.

FOR a time the agitation in Cregby over the loss of Simon Cowlthead was great. Souls came into being and souls departed there, as elsewhere, often enough; but generally they came and went so quietly that the joy or trouble of it scarcely spread from one end of the village to the other. But this was

an affair of a very different order. The event was actually chronicled in the great county paper in a paragraph all by itself, with a great head-line thus: **TERRIBLE DEATH OF A CLIFF-CLIMBER AT CREGBY**—a thing well calculated to make the Cregby people proud of themselves, for even their greatest stack fire, years ago, when three of Farmer Runch's horses were burned besides several pigs, had been brought before the world only in a scrap a few lines long packed away in a column of local items. Therefore they passed the paper from hand to hand, and studied and criticised every line of the paragraph, greatly gratified to find themselves all at once so famous. And every night in the little kitchen of the Grey Horse, though John Bower drank his beer in gloomy silence, the other man gave to the assembled company every incident of that eventful afternoon, and repeated it for the benefit of every new-comer. It seemed as though the village had at last got a topic of conversation other than the state of stock and crops. Then it was whispered among the women that Simon's ghost had been seen near the place where he was lost. The men heard of it from their wives, and said nothing, but avoided after nightfall the fields which lay above Fourscore.

But this could not last forever. In time the matter grew stale, and even among his immediate kin, where there was real grief for Simon, the cares which each day brought gradually settled down upon his memory and dimmed it. For a week or two the poor mother sat down to have "a real good cry" whenever she could find time, but with her family of six to look to, and turnip-hoeing, and then harvest coming on so quickly, it was but little chance she had, poor soul, until after she got to bed at nights; and even then she had to cry very quietly for fear of waking her goodman, who needed all his rest badly enough after his day's work. He, too, used at first, as he bent to his hoe, often to have to sniff and pause, and under pretence of straightening his cramped limbs draw

the palm of his rough hand across his face. And there was a servant-lass at a neighboring farmstead whose tears sometimes fell into her milk-pail as she leaned her head against the ribs of the unconcerned and careless kine.

But as soon as the news and the grief had lost their freshness, there was, so far as Cregby was concerned, an end to the matter; and except when the story of the great accident was revived to impress some chance visitor with the importance of the place, Simon was forgotten. A better man filled his post, though not a better climber; and every season the birds came to the cliffs to lay their eggs, and the men went down to gather them just as before. For the first few years the Cowlthead gang avoided Fourscore, but after a time even this feeling died out, and they climbed it again in its order as a matter of course. Three-and-twenty years passed thus. The accident had become almost a legend, but John Bower (Old John every one called him now) was still head-man of the Cowlthead gang. After a long lapse the gang once more rejoiced in the presence of one of the traditional name, for young Stephen Cowlthead, who was born the year after his brother Simon was lost, had come to the cliffs. The men noticed that their luck improved from the day of his coming, and firmly believed that it was the power of the old name. Probably a truer reason might have been found under Old John's oft-repeated declaration that "a better climber than Stephen had never climbed, always barring his poor brother Simon." By this time Cowlthead the father had been gathered to his fathers, and the mother, old and feeble, had found shelter with one of her married daughters and nursed the swarming bairns of another generation. Thus things stood in Cregby when it happened upon a certain day that the Cowlthead gang had once more fixed their ropes to climb Fourscore.

"Now, watch the rope well across that sharp edge just above the big crack," said John, as Stephen stood

ready to descend, — a fine, strong, good-natured lad, who was better liked by the villagers than poor Simon had ever been. John had repeated this warning so often at this place that it had lost all meaning to the others; but the old man had never forgotten the shock of that terrible day so many years ago. It was this which made him doubly sensitive at Fourscore to every tremor of the line. "What a stroke the Jad has, to be sure!" he muttered now as the rope ran rapidly through his hands. "Give him a bit of straight cliff an' he'll all but flee! Now for the slack spot, — steady there, Jacob! There, that's all right! He's on the big shelf now, an' he's cast off to walk to the other end."

While the rope hung idle the two men lit their pipes; but they had scarcely tasted the tobacco before the hand-line struck sharply. "Hup!" cried John casting away his pipe and beginning to haul steadily. After a moment's work he took alarm. "Summut's amiss," he said; "he's in such a hurry; I dreads summut's frightened him. What ever makes him hang so strange and lumpy? Hup, Jacob! Hup quick!"

Faster and faster they swayed to the rope. Speedily a hat, and with the next stroke a head and shoulders rose above the edge. "What the devil —" exclaimed John, and then words failed him and he stood stock still, though yet holding tight upon the cable. For it was a brown and bearded face that grinned at him, a face altogether strange to him. Without a sound this apparition drew itself forward by the hand-line unaided, and came nimbly up the slope. It stood before them on the sod in the shape of a stalwart, middle-aged man, clothed in dark attire of excellent quality, albeit of rather outlandish cut, with a broad gold ring on the little finger, and a heavy gold chain depending from the watch-pocket; altogether a figure in striking contrast with the coarse work-day aspect of the cliff-climbers. The apparition gazed down with sardonic enjoyment upon the helpless amaze-

ment of the terrified men. But a moment later John Bower had recovered his wits, sprang upon the stranger, and fettered him securely with two or three sudden coils of the loose rope.

Then grasping the still grinning figure firmly by the arms the old man forced it backward to the very edge of the descent. "Whether thou's the devil, or whoever thou is," he shouted fiercely, "if thou's done aught amiss to that lad down there, over thou goes. Speak out, afore I counts ten, or I chucks thee down! One, — two, — three, — four —"

Whereupon the stranger ceased to grin, and spoke. "It's all right, John Bower," he said. "I'm Simon Cowlhead come up again."

But old John was not satisfied and did not relax his grip. "Play neither devil nor ghost wi' me!" he said sternly. "Is the lad safe? If not —" and he almost shook the startled joker from his perilous foothold.

"Let me go, John! The lad's all right enough. I only borrowed his ropes. Hark! He's shouting now to know what's become of 'em." The truth of this statement was borne out by the sound of a faint hallo from below.

"Come here, Jacob, and hold this chap fast while I gets the lad up," was old John's mandate as he handed over his prisoner to his companion. "We'll larn more about this after that." The trembling Jacob most unwillingly obeyed, only half reassured even when he felt warm, substantial flesh in his grasp, instead of anything clammy or ghost-like. John deftly sent down the rope and set it swinging, and in a moment he felt that it had been grasped by a familiar hand below. His countenance upon this denoted his feeling of immense relief; but nevertheless it was not without some anxiety that he watched the edge of the cliff, as a fisherman might watch the water who has just landed one uncanny monster and is afraid that he may have hooked another. But it was "Stephen lad" who came up, and no other; and then the old man turned to their captive and

said, "Now let's hear what you have to say, and mind an' tell us no lies."

Thus admonished, the uncomfortable apparition began his history, stammering very much over the earlier part of it, John Bower watching him meanwhile with severe and contemptuous eye, and the other two with open-mouthed astonishment. He glossed as best he could over the story of the broken rope, pretending that the breakage was really accidental, and that afterwards while waiting he unintentionally fell asleep. No one made any comment upon this, but the speaker read from old John's face that one at least of his listeners refused to accept this lame tale and guessed the truth. Then he told truly enough how, after his night in the cliffs, he had found himself too much ashamed to show his face at home, and had made off to a large seaport, where he got work as a carter, but couldn't settle there at all, yet still was more afraid of coming home than ever, and therefore, as soon as he had scraped enough money together to pay his passage, he took ship for Australia. There he went to farm-work again and liked it; and by and by he got to farm a bit of land of his own, and worked it for a good many years; till a railway came, and a town sprang up all round him, and folks kept worriting and worriting him to sell out. But for a long time he wouldn't; till at last some one went and offered him such a lot for his land that he felt bound to part, and did. But after that he felt unsettled again, and didn't exactly know what to put his money into out there, so he thought he'd come and have a look round and see how things were getting on in the old country, — so here he was, and glad to see 'em.

"But how came you to be down Fowerscore?" demanded John, at the end of this recital.

"Well, you see," explained the wanderer awkwardly, "I felt rather shy even yet about coming back to Cregby, so I've been stopping for a few days at Braston yonder, where an odd stranger more or less isn't noticed; and I walked up here this morning to have a



look at all the old spots, and then I tried that way up I knew of; and for a wonder it's as easy to get down there as to get up; and I climbed about and enjoyed myself till I got right on to them big ledges again, and then I saw your ropes come down, and thought, by Jingo! what a joke it would be to give 'em a bit of a surprise! So when the lad there let go and went after eggs I just came out of a hole, and got hold of 'em, and here I am."

"Ay, there thou is, Simon!" echoed John Bower with contemptuous irony. "There thou is! I thought it was the divil we'd brought up; but it was summat warse,—it was a d—d fool! Folks allus says 'fools for luck;' and that's how it's been wi' thee, Simon. However, we'll climb no mair to-day, lads. This fool's got money, an' he'll have to stand us all drinks an' summat mair besides at Grey Hoss yonder for the trouble he's gi'en us. Fools for luck!" So off they went; and once more for a time there was something interesting to talk about in Cregby.

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From The National Review.  
A STROLL IN BOCCACCIO'S COUNTRY.  
BY MRS. ROSS.

To lovers of Boccaccio the small streamlet Affrico which rises in the Fiesole hills, and flows along the eastern side of the Campo di Marte, near Florence, will recall the "Ninfale Fiesolano," with its poetical descriptions of the surrounding country, telling of the impetuous love of the handsome youth Affrico for the bashful nymph Mensola; a love which aroused the dire vengeance of the chaste goddess Diana.

The destruction of the forests which once clothed the hills round Florence has changed the whole face of the land. Writers, contemporaries of Boccaccio, speak of shady woods, of rills, and springs, and lakelets, whose memory is only preserved in the names of various villas, and of farmhouses which once were villas, belonging to the great Florentine families—"La Fonte," "La

Fontanella," "Font' all' Erta," "Il Vivaio," and others. Which was the

bella e chiara fonte

Di fresche erbette e di fiore adornata,  
La quale ancor dimora appiè del monte  
Cecer, da quella parte ove 'l sol guata  
Quand' è nel mezzogiorno a fronte a fronte  
where Diana threatened her nymphs with death if they listened to a lover's pleading, none can say. But Monte Ceceri is still the quarry whence Florence draws grey freestone for her palaces; the Affrico and the Mensola still meander murmuring down to the plain, where they unite before falling into the Arno; and the peasants will tell you the air of Settignano is so *fine* (sharp, refined) that a fool cannot live there.

The view from the little bridge across the Affrico is very fine. To the left the hills are studded with peasants' houses and with villas, many of them interesting from association with men great in story or in art. Far away rises Vallombrosa—sombre in its clothing of pine woods in summer, white with snow in winter—making a background for the pretty little village of Settignano and the hills of Pilli and L'Incontro. Tradition says the latter was the meeting-place of the gentle enthusiast St. Francis, who so loved animals that he spoke of the birds as "our sisters," and of St. Dominick, the fantastic instigator of the horrible massacre of the unfortunate Albigenese. In the plain lies the old Villa Fontebuoni, now a school, where Benedetto Varchi wrote a great part of his "Storia Fiorentina," and often entertained the beautiful courtesan Tullia d'Arragona, whose portrait at Brescia by Bonvicino justifies the passionate verses addressed to her by so many poets of that time.

Muzio wrote of those, —

occhi belli,

Occhi leggiadri, occhi amorosi e cari,  
Piu che le stelle belli e piu che il sole.

Ercole Bentivoglio indited sonnets to her "celestial brow;" Bernardo Tasso discussed the theme of love with her in the presence of Niccolo Grazia and Francesco Maria Molza at Venice, and called her "la mia signora." Ales-

sandro Arrighi praised her wise conversation and most rare beauty, and the

bei costumi e 'l portamento adorno  
E col dolce cantare il dolce suono  
Che fan di marmo una persona viva.

Her mother, celebrated for her beauty, was from Ferrara, her father was Cardinal Luigi d'Arragona, son of Errico, Marquis Gerace, natural son of Francis I. of Arragon, King of Naples, and of Diana Guardato. Tullia was born in Rome and educated in Siena and Florence, where she learnt music and developed a taste for literature. When she returned to the latter town as a woman of twenty-five, Filippo Strozzi was one of her many admirers. A long letter to him from Francesco Vettori deploras that his name should be mentioned as one of the six champions who defied the world "according to the rule of ancient and glorious knights" in honor of "the lady whose equal or like never has been, and never will be in any future centuries." Strozzi evidently listened to his friend's remonstrances, for his name does not appear among the signatories of the curious document.<sup>1</sup>

Tullia hired a villa on the banks of the Mensola in order to be near "Patron mio caro," as she called Varchi, who, in spite of the "silvered hair" he talks so much about, succumbed to the charms of the beautiful woman. Even after love had cooled into platonic friendship he continued patiently to polish and sometimes re-write, in his elegant, scholarly language, the sonnets and verses of Tullia, who aspired to be a second Sappho.<sup>2</sup>

Her reputation as a poetess caused the Grand Duke Cosimo to excuse her from wearing the yellow veil, odious sign of her profession. She sent a sonnet with her petition, the original of which is in the State archives of Florence with:—

Fassell gratia per poetessa,  
in Cosimo's handwriting on the margin.

<sup>1</sup> Codex Rinnuocini.

<sup>2</sup> Rime della Sigra. Tullia d'Arragona e diversi a Lei. Vinegia. 1547.

Poor Tullia died in March, 1556, in a small hostelry in the Trastevere at Rome, and was buried near the high altar of Sant' Agostino.<sup>3</sup>

Boccaccio may have seen the destruction of the stronghold of the Del Manzecca family, robber lords who harried the country round and levied toll on all who crossed the steep pass into the Mugello. In 1348 the Republic of Florence lost all patience and ordered Castel di Poggio to be stormed and dismantled. Some hundred years later it was bought by the Alessandri, who repaired the castle and restored some grotesque frescoes in the chapel, now nearly effaced.

Below Castel di Poggio, Vincigliata towers high among the pine woods and the cypresses, a remarkable restoration of an old feudal castle. If one of the Visdomini, the ancient lords of Careggi (Campum regis), as the place was once called, could return, he would feel himself quite at home in Mr. Temple Leader's noble fortress.

The Usimbardi were the next owners of the castle and, of course, were at deadly feud with their neighbors of Castel di Poggio—thereby hangs a tale, a ghost story.

Giovanni Usimbardi, a friend of Dante, Cavalcanti, and other illustrious Florentines, had a daughter named Selvaggia, with whom the two sons of Del Manzecca fell in love. Simone, the eldest, asked her hand in marriage and was refused, so he stabbed her father, fortunately only wounding him. The second son, Uberto, met the maiden at mass in the church of Sta. Maria di Vincigliata, and by his beauty and gracious presence won her heart. To cut a long story short, the life of Giovanni Usimbardi was twice saved in battle by an unknown knight, with a small knot of blue ribbon tied to the buckle of his breastplate. The second time the stranger was felled to the ground, and on his helmet being removed Usimbardi recognized Uberto del Manzecca, the son of his hated neighbor. The long-standing feud was

<sup>3</sup> See Un' Etera Romana. Dr. G. Biagi. Nuova Antologia, August, 1886.

made up and the wedding day was fixed.

As Selvaggia, in bridal array, stood at her casement watching the lithe figure on the good black horse which knew the road so well down from Castel di Poggio to Vincigliata, she saw three men dash out of the wood. One seized the horse's bridle, the second pulled his rider out of the saddle. Before the young knight could draw his sword the third plunged a dagger into his heart. The murderer was Simone, Uberto's elder brother.

There is every probability that Sir John Hawkwood, while in the service of Pisa with his famous White Company, sacked Vincigliata, as we read that the new owners, the Alessandri, rebuilt it in 1368. Some years later Niccolo degli Alessandri brought his bride Agnoletta, daughter of Bettino Ricasoli of Broglio, to the castle, whence her granddaughter Ginevra rode down to Florence in great pomp to marry Giovanni de' Medici.

After the fall of the Republic the power of the Alessandri waned. In 1637 Messer Francesco, who cared for nothing but hunting, was living in a corner of the old castle with his young son and an old maiden aunt. A few years later the only inhabitants were the youth Giovan' Antonio and his page. In 1751 the entry into the church registry of Vincigliata runs: "No one lives in the ruined palace of the Signori Alessandri, but holy water is still sprinkled in the empty rooms when Easter comes round."<sup>1</sup>

Below Vincigliata, on an isolated hill jutting out into the valley of the Arno, between the streamlets Affrico and Mensola stands the square machicolated castle Poggio Gherardo, identified by students of Boccaccio with the "palagio" in which the joyous company of seven ladies and three youths took refuge when they fled from the plague of Florence in 1348.<sup>2</sup>

Tradition says "Palagio al Poggio,"

<sup>1</sup> For a full account of Vincigliata see monographs by Baroni, Marcotti, and Leader Scott.

<sup>2</sup> See Baldelli, Vita di G. Boccaccio, Moreni, Repetti, etc.

as the castle was anciently called, stood many a siege, and that when Sir John Hawkwood razed Vincigliata he destroyed the eastern *façade*, only partially rebuilt some two hundred years ago. It passed through several hands until in 1433 the Zati family sold it to Gherardo Gherardi. He changed the name from "Palagio al Poggio" to "Poggio Gherardo," and his descendants held the place for four hundred and fifty-six years. It was bought by Mr. Ross in 1889.

One of the Gherardi, Ruberto, wrote in 1740 a long-winded but curious book, "La Villeggiatura di Majano,"<sup>3</sup> which has never been published, describing the hills of Fiesole, Majano, and Settignano, the villas, and the families they belonged to. If for nothing else, his manuscript is valuable as suggesting, or rather asserting, that Giovanni Boccaccio was born near the banks of the Mensola. Till now Paris and the Costa, near Sta. Felicità in Florence, have disputed the honor of giving birth to the great master of the Italian language. After a tedious account of various properties, Ruberto Gherardi mentions "a small villa near Corbignano, a townlet on the slope of the hill where rises the second branch of the torrent Mensola, and in the parish thereof. . . . Descending but a few paces toward the plain we come to the villa and farm now owned by Sigr. Ottavio Ruggeri. This villa in the ancient times was bought by Boccaccio di Chellino, perhaps when he first abandoned his native town Certaldo for Florence, and here was born in 1313 our master Giovanni, whose birthplace has hitherto been sought for in vain. . . . I am the more persuaded that our master Giovanni was born in this place from the fact that it lies about a mile from the valley of Ameto, under which name he speaks of himself in the 'Commedia delle Ninfe Fiorentine,' and says that 'as a wandering lad Ameto often came to these woods to visit the fauns and the dryads who inhabited them; perhaps being de-

<sup>3</sup> MS. Gherardi, National Library, Florence.

scended from an ancient race of these hills, he was almost constrained thereto by an innate love, and remembering his origin, with pious memory came at times to do them honor.'"

With infinite patience old Gherardi identifies the different spots mentioned in "*Ninfale Fiesolano*," "*Ameto*," and the "*Decamerone*." As before mentioned Poggio Gherardo is generally accepted as the place Boccaccio had in his mind when describing the "place on a small hill, equidistant on all sides from any road," to which the joyous company of seven ladies and three youths walked on Wednesday at break of day to escape from the plague then raging in Florence. At two short miles from the city they arrived at the foot of the hill. "On the summit was a 'palagio' with a pleasant and large courtyard in the centre, with arcades and halls and rooms, each one beautiful and well ornamented with jocund paintings, surrounded by fields and with marvellous gardens, possessing wells of freshest water and cellars full of precious wines more suited to curious toppers than to sober and virtuous women."

Here Pampinea was crowned queen with an "honorable and beautiful garland of bays," and here she commanded Panfilo to begin the series of immortal tales known all the world over as the "*Decamerone*." At the end of the first day Pampinea ceded the garland, emblem of royalty, to "the discreet maiden Filomena," and the joyous company then went slowly down to a stream (the *Mensola*) of clear water, which, from a height near by, flowed among rocks and green herbage through a valley shaded by many trees. Here barefooted and with naked arms they descended into the water and disported themselves, until, the hour of supper being at hand, they returned to the palace and supped with great contentment.

The second day passed in like manner and Neifle was chosen queen. She commanded that there should be no story-telling on Friday or on Saturday, "apt to be tedious to most folk

because of the viands eaten on those days."

It was done as the queen willed, and all looked forward with longing to Sunday. But she, thinking that having passed four days in the "palace on the hill" others might join them, roused the household at break of day and sent on the seneschal to prepare the new abode she had already chosen. "Then with slow steps the queen, accompanied and followed by her ladies and the three youths, and led by the song of maybe twenty nightingales and other birds, walked towards the west by an unfrequented lane full of green herbs and of flowers just opening to the rising sun. Gossiping, joking, and laughing with her companions, she led them, after proceeding some two thousand paces, to a beautiful and splendid palace, before the half of the third hour had passed."<sup>1</sup>

The unfrequented lane may yet be followed, fragrant with wild violets and narcissi, leading through cornfields bright with sweet-scented yellow tulips and scarlet anemones, from near Majano across the Affrico towards San Domenico. The hedges are tangled with eglantine and honeysuckle, and here and there an old oak recalls the forest that once existed. Nearly every villa and every village within sight is connected with some illustrious name. Settignano recalls the great sculptor and architect Desiderio da Settignano, and Michelangelo Buonarroti who, put out to nurse at his father's farm near the village, afterwards told Vasari, "I drew the chisel and the mallet with which I carve statues in together with my nurse's milk." From Corbignano a family of sculptors emigrated to France, sons of Giusto Betti, known in French art-history as *Les Justes* of Tours. Those great artists Giuliano and Benedetto da Majano were born at Majano, and close at hand is the house which once was Macchiavelli's. Florentine Platonism may be said to have had its stronghold among these hills. The three brothers Benivieni lived at

<sup>1</sup> One and a half hours after sunrise.

Villa Querce,<sup>1</sup> only separated by a small valley from Marsilio Ficino. One was an able doctor; another, a canon of San Lorenzo, called "my *companion*," by Ficino, had the courage to defend Savonarola. The third brother was a poet whose "Canzone dell' amore celeste e divino" was thought worthy of a commentary by Pico della Mirandola. Devoted friends, they are united even in death, for they lie in the same grave in the church of San Marco in Florence. The family of Valori owned much property about here, and the villa still exists<sup>2</sup> where the great platonist Marsilio Ficino was for so long the guest of Niccolo and Filippo Valori. Pico della Mirandola and Poliziano no doubt often came down from Fiesole to visit their friends, and in the ninth book of Ficino's letters (No. I.) he describes a walk on these hills with "our Pico" and their conversation about a salubrious villa. The latter fixed upon a building hard by as fulfilling all his desires, when Ficino tells him that "it is said to have been built by that wise man Leonardo Aretino, while just beyond was the abode of Giovanni Boccaccio." Below, to the left, is the Salvatino, once belonging to Duke Salviati, whose good old wine is recorded in Redi's jocund poem "Bacco in Toscana."

Where the hewn rocks of Fiesole impend  
O'er Doccia's dell, and fig and olive blend.  
There the twin streams of Affrico unite,  
One dimly seen, the other out of sight,  
But ever playing in his smoothen'd bed  
Of polisht stone, and willing to be led  
Where clustering vines protect him from  
the sun.

Here, by the lake, Boccaccio's fair brigade  
Beguiled the hours, and tale for tale repaid.

Thus sang Walter Savage Landor,  
whose villa, Il Frusino,<sup>3</sup> stands just  
above the small plain where once was  
the lake of the Valley of the Ladies.

But we must return to the "Decamerone." When the queen left the first "palagio" on Sunday morning at sunrise she led her companions "to a

most beautiful and sumptuous palace raised somewhat above the plain on a small hill. Entering in and going all over it, and seeing the large halls, the cleanly and well-decorated rooms, fully stocked with everything pertaining unto rooms, they commended it highly, and esteemed the owner to be rich and powerful. Then descending to see the vast and joyous courtyard of the palace, the cellars full of excellent wines, and the ice-cold water which welled up in large quantity, they praised it yet more."

The garden with wide walks covered by vine trellises and hedged in with white and red roses and jasmine, so that even when the sun was high there was scented and delightful shade, and the marvellous white marble fountain next called their attention. The overflow from the fountain, led in conduits about the garden, at last formed one stream and flowed down to the plain, where "with great force and no small gain to the owner it turned two mills."

The "sumptuous palace" with the beautiful gardens, which the seven ladies and three youths affirmed to be paradise on earth, has always been identified with Villa Palmieri.<sup>4</sup> Here it was at the close of the sixth day that the queen took off her crown of bays, and, laughing, placed it on the head of Dioneo saying, "It is time, Dioneo, that thou shouldst learn what an undertaking it is to rule and to guide women." And as though she wished to show how difficult that was, Eliza led off her six companions to a spot unknown to any—the Ladies' Valley. Here they found a small lake, and, having set their tire-women to watch that none should approach, took off their raiment and bathed. On returning to the palace they described the beauties of the valley, and the king ordered that next day the seneschal should prepare the midday repast by the lake, where the seventh day was passed in great pleasure, listening to the tales told by each member of the joyous company.

<sup>1</sup> Now De Montfort.

<sup>2</sup> Villa Panattoni.

<sup>3</sup> Now belonging to Professor W. Fiske.

<sup>4</sup> Belonging to the dowager countess of Crawford and Balcarres. See Manni, Moreni, Baldelli, etc.



